

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

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## Manufacturers' Record.

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BALTIMORE, APRIL 22, 1909.

### SIZED UP AT ATLANTA.

Evidence is increasing daily that the principal value of last week's meeting at Atlanta of the so-called Conference for Education in the South was in its emphasis of the fact that the campaign maintained by the MANUFACTURERS' RECORD against the movement behind the Conference has been effective for the good of the South. Even the game that was attempted in connection with the Conference could not be pulled off as completely as was intended. But more of that later.

### MENTIONING THE MEDIUM.

P. D. de Pool, manufacturers' agent, of Havana, Cuba, writing to the MANUFACTURERS' RECORD of a connection he has made with a manufacturing company of the United States, adds:

I suppose you have been the instrument of their having written to me, for they addressed me first. I have always taken care to mention your name as the one having named manufacturers to me, and it would be nothing else than fair to do so, for you have done me many a good turn, and many good connections I have made have been through your paper or recommendations.

If everyone having the experience of this correspondent should do as he has done and mention the agency of the MANUFACTURERS' RECORD in bringing him in touch with manufacturers, we are sure the manufacturers themselves who desire to trace the influences bringing business to them would be gratified. Many tracing devices are resorted to, but none of them is as satisfactory as the direct letter informing the advertiser voluntarily through what medium business connections have been sought or obtained.

### OPPORTUNITIES.

It's an interesting thing, this spirit of trading which is uppermost in the minds of so many of us. It is governed by laws as immutable as the laws that control the stars and yet as variable as man's nature.

We are nearly all bent on trading of one kind or another, and when we haven't anybody to trade with, or any place in which to do our trading, we set about finding a man or a market.

This will serve as a brief description of a market place where nearly everything made by man and things not created by man are bought and sold. Men themselves who offer their talents and work to those who need them use this market place to sell their services, while those who want help in their business assemble here and by their advertisements point the way for the unemployed to their workshop or office. It is necessary to have a market and a market place.

Realizing the need among buyers and sellers to have put before them in brief classified form the "opportunities" which each had to offer the other, the MANUFACTURERS' RECORD a few years ago established its "Classified Opportunities" department. It has been a pronounced success from its start. Here for a nominal cost every merchant who has property or merchandise of any kind to sell is almost sure to catch the eye of someone interested in the identical thing he wants to dispose of, while those who want to buy usually find an announcement in this department productive of correspondence which leads to the filling of their wants.

This department affords interesting reading even to those who may not be actively trading at the moment. It shows what others are doing and often-times presents suggestions for profitable trade openings.

It will be profitable to study these announcements of our advertisers—you who have money and you who want to get it, you who need employment and you who want employees.

### FROST-BITTEN FEET FOR THE SOUTH.

A prominent Southern Democratic Senator, in discussing the proposition to injure the South by reducing the tariff on iron ore and other Southern products, writes:

While we are having a protective blanket, I shall object to its being cut so short as to give the South cold feet while other parts of the country are covered.

Most of the Representatives in Congress from the South do not seem to be able to view the matter in this way. They are willing to see their section have frost-bitten feet and go hobbling through life merely to accommodate the Pennsylvania Steel Co. and Mr. Schwab and Mr. Gates and many other people who are striving to advance their own interests even though the South has to pay the cost.

### THE EFFORT TO SECURE FREE IRON ORE.

A letter from an ironmaster to a leading Southern iron-ore owner, referring to a recent meeting of iron, steel and iron-ore people with a view to discussing the question of protection to all interests, says:

While we were discussing the question Mr. Charles M. Schwab came in the room. The gist of his argument was a threat that if we did not all join in his fight to advance the duty on steel products he would advocate at Washington free ore and scrap and low duty on pig iron. I think he is working in harmony with the Pennsylvania Steel Co. on the ore question, as the Bethlehem Steel Co., which he controls, is largely interested in Cuban ores. Mr. Schwab took the ground that free ore would assist the Eastern furnaces and not injure the Western furnaces, as the long freight haul would protect the latter. I asked him where the South came in on that argument, and he said that was another question; so it looks as if we were getting it going and coming. If we are to have free lumber to punish the lumber trust, free hides to punish the beef trust, free coal to punish the coal barons and free ore to punish the U. S. Steel Corporation, it would look as if the South was to pay the piper.

In connection with Mr. Schwab's reported threat it is interesting to turn to his testimony before the ways and means committee last winter. In that testimony Mr. Schwab, referring to the great quantity and the high quality of the ore which his company had secured in Cuba, stated that this ore could be landed on the Atlantic Coast and carried by rail to Pittsburg and delivered there as cheaply as Lake ores. Mr. Schwab testified that this discovery in Cuba, "to my mind, is going to make a radical change in the iron-ore situation." He also testified that at the great works of the Bethlehem Steel Co. he had ceased to use domestic ore, and was using nothing but Cuban ore. Within the last two or three years the Bethlehem Company has spent about \$17,000,000 or \$18,000,000 in the enlargement of its plant, the basis of this vast expenditure and this great enlargement being Cuban ores.

When Mr. Carnegie, who, holding the first-mortgage bonds on the United States Steel Corporation, loves the company so well that he would no doubt be delighted to have the privilege of exchanging his bonds for a title to the company's properties, testified before the ways and means committee he said:

The Pennsylvania Steel Co. has a mine of wealth in its ore in Cuba. They expect and I believe they are going to make a quality of steel far superior to any made now, and at a cost which no other can reach except that enterprising young man Schwab of the Bethlehem Company, for he also has a mine in Cuba. They are going to make a great fortune out of their ore.

In the light of these interesting facts Mr. Schwab's reported threat as quoted in the opening paragraph of this article is very illuminating. When he and the Pennsylvania Steel Co. made their investments in Cuba and other people now striving for free ore made their investments in Canadian ore properties there was no open discussion in advocacy of free iron ore. We would not

presume to suggest that these distinguished men, including that philosopher and lover of mankind, that giver of libraries to every town willing to bind itself forever to advertise him by carving over the door of the building the name of Carnegie, had any thought of being able to effect in the future any deal which would give them the added profit of the free importation of iron ore. Their investments were made with the distinct knowledge that iron ore was subject to duty. And yet some unkind man willing to question movements of this sort might dare to ask if when these purchases of foreign ores were made and vast enlargements of plants were projected for the use of foreign ores any sort of a deal had been made with politicians or public men looking to the putting of iron ore on the free list, and to ask, if any deal was made, with whom was it made. These questions, of course, would not be asked by any except querulous people inclined to question the acts of those who make such threats as Mr. Schwab is quoted as having made and those who do not worship at the great librarian's shrine. The question might however, be raised by anyone as to whether Mr. Schwab and the Pennsylvania Steel Co., which in the eyes of Mr. Carnegie are "destined to make a great fortune out of their ore," ought not to be satisfied with their "great fortune." Mr. Carnegie is an expert in at least one thing, and that is what constitutes a "great fortune." Why should American iron interests and American iron-ore miners be made to contribute still more largely to the "great fortune" to be won by Schwab and the Pennsylvania Steel Co. out of their Cuban ores? Nobody will begrudge them their fortune, however great it may be, if they deal fairly with the American people, but woe be unto the men and the corporations who, while striving to maintain a tariff on their own goods, are willing to wreck others for their own profit! Sometimes people sow the wind and reap the whirlwind.

In the discussion of a tariff bill it is presumed that members of the House and Senate are not unmindful of the need of securing adequate revenue. Among the absurdities of the tariff bill as it went from the House is that of putting iron ore on the free list. Many of the other propositions of that bill were equally absurd, but let us look for a moment at iron ore as a specific case. The importations of iron ore in 1907 were 1,229,168 tons. Owing to the depression in business there was a decline in the following year, but the imports of 1907 exceeded 1906 by 160,000 tons. Why should ore, which has really been paying a rate of duty much too small, be put on the free list or the duty reduced? As the MANUFACTURERS' RECORD has repeatedly pointed out, the effort to secure iron ore under the guise of free raw materials is simply in line with the plan of many consumers of iron ore, lumber, coal and other things

to secure free importation or a greatly reduced duty for their own selfish ends, regardless of how others might suffer thereby. The Pennsylvania Steel Co., which is controlled by the Pennsylvania Railroad, in 1908 issued a circular-letter calling attention to the fact that it owned the Spanish-American Iron Co. and through this ownership had secured a vast ore property in Cuba "estimated by its engineers to contain 600,000,000 tons of iron ore." This letter was issued in the interest of bonds which the company was then selling with a view to securing new capital for the development of the ore properties on a large scale. In this letter it was said:

The properties are most advantageously located for development and for economical mining, the ore being a surface deposit without any cover, which can be taken out with steam shovels, just as clay is dug out of an ordinary clay bank.

This circular-letter also said that the Pennsylvania Steel Co. and its subsidiary, the Maryland Steel Co., "agree to take and pay for a minimum of 1,000,000 tons of ore annually at a price which will net a profit of at least 60 cents per ton to the Spanish-American Iron Co.," giving to the Spanish-American Iron Co., and thus to the Pennsylvania Steel Co. which owns it, an annual minimum profit on this ore of \$600,000.

It has not, however, been the expectation of the Pennsylvania Steel Co. that the output of ore would long be confined to the minimum of 1,000,000 tons annually. In fact, with 600,000,000 tons of ore, so easily mined that steam shovels can put it on the cars at a few cents a ton, the company could mine at the rate of 6,000,000 tons a year and still have a supply to last a century. The guarantee to take a minimum of 1,000,000 tons a year at a minimum profit of 60 cents a ton was made to the public through this circular-letter at a time when there was no reason to suppose that iron ores would ever be put on the free list. The company, therefore, making this exceptionally large profit of 60 cents a ton would simply be benefited to an extent equal to any reduction on iron ores, and that, too, at the expense of the iron-ore people of this country. If a revenue is desired, why should the Pennsylvania Steel Co., otherwise the Pennsylvania Railroad, and the Bethlehem Steel Co., which own a vast amount of ore in Cuba, and Canadian companies, which expect to ship largely to the United States, be given the privilege of sending ore into this country free of duty? If, instead of reducing the duty, it should be increased to 50 or 75 cents a ton, their advantages are such that they would still ship the ore into the United States, but on a somewhat fairer basis to the iron-ore miners of our country. With the cheap labor of Cuba and the ability to mine these remarkable ores by steam shovels at an almost nominal cost, the thousands of miners working in iron-ore mines in this country would be compelled to suffer. Many American mines would of necessity be forced to shut down or else to reduce wages somewhat to a parity with the starvation wages of Cuba. The circular-letter of President E. C. Felton, to which reference has just been made, says that in 1901 "the Pennsylvania Railroad and the Philadelphia & Reading Railway purchased \$10,000,000 par value of the outstanding preferred stock and \$10,000,000 of the \$10,750,000 outstanding common stock" of the Pennsylvania Steel Co. Thus out of a total issue, common and preferred, of \$27,250,000 these two companies own \$20,000,000 of stock. Free ore would therefore be

largely for the benefit of these two railroads and the Bethlehem Steel Co.

The struggle of the Pennsylvania Steel Co., with all the influences that are back of the company in this effort to secure free iron ore or a reduction on iron ore, is in line with the other active workers for free ore and free coal and free lumber and free everything else that will injure the South to the benefit of other sections. Mr. John W. Gates, for instance, in an interview in New York under date of April 14, is quoted as saying: "I know most about steel and coal, and I have always been in favor of having both iron ore and coal on the free list." Quite true. The MANUFACTURERS' RECORD is not at all surprised at Mr. Gates' generosity. But is it not true that Mr. Gates and his associates own a vast iron-ore property in Canada which they are now developing on a large scale? Is it not true that they expect to ship a million tons or more of iron ore every year from their Canadian property into the United States? And if they could succeed in getting free iron ore, would it not mean a saving possibly of half a million dollars a year to be added to their profit? Is it not likewise true that they bought these Canadian ores at a time when there was no expectation of free iron ore? Is it not true that they invested their money in Canada, fully realizing that they could make a large profit on shipping iron ore even after paying the duty, and even if the duty should be 50 cents or more a ton? Are they not now actively favoring free ore simply because their own individual interests would be benefited thereby?

In line with these facts is an interview published in the Baltimore *American* with Mr. Joseph R. Foard, a leading steamship owner and agent and banker of Baltimore, who handles all of the iron-ore importations of the Pennsylvania Steel Co. at this port. Naturally, Mr. Foard takes the ground that free ore is a very important thing. He wants to handle as much as possible. He points out that the development of iron-ore imports at Baltimore has brought many steamers here which have found outward cargoes to the West Indies and elsewhere. This, Mr. Foard argues, is beneficial to our foreign trade by bringing to this port many steamers which otherwise might not come to Baltimore. In this way steamer room is provided for the export of American goods. Commenting on this and referring to the possible control of the commerce to be developed by the building of the Panama Canal, Mr. Foard says:

To do it we only need to encourage foreign business, and I can conceive of no surer or better method to do so than to make iron ore absolutely free.

Carry the argument a little further. If the importation of iron ore free of duty will increase the ocean shipping facilities of Baltimore, the importation of finished-steel products, rails, plates and all other steel goods free of duty would bring still more steamers here. Why not carry the argument to a conclusion and throw open our ports to all steel products free of duty and let the foreign producer flood our markets with finished steel, and thus give us an abundance of steamer room for outward business? The fact that this would bankrupt most of our steel industries, and thus necessarily many other lines of business, need not be taken into account. The fact that it would prevent the receipt of any revenue on the part of the Government is likewise immaterial. What boots it

whether the Government secures revenue or whether our industries be destroyed by foreign competition if we can only get plenty of foreign steamers to come here loaded with products of other lands instead of utilizing our own resources? The MANUFACTURERS' RECORD again urges the representatives of the South in Congress and all others representing kindred interests to stand squarely on the ground that if ore is made free or the duty be reduced that every finished product of steel shall be treated exactly the same; that if the pig-iron duty be reduced, textile machinery and other machinery into which pig-iron enters be reduced to the same extent. And it advocates the same policy as to lumber, coal and all other products of the South.

Even if the duty were 50 cents or more a ton, iron ore would come in in ever-increasing quantity and furnish a large revenue to the Government, for the Pennsylvania Steel Co. and the Bethlehem Steel Co., according to their own statements, will annually import in the aggregate a good many million tons without regard to the duty. The trade would still be exceedingly profitable to the owners of Cuban and Canadian ore properties, and the Government would collect a large revenue with fairness and justice to these owners of foreign ores as well as to the owners and miners of ore in the United States.

If Lake Superior ores are worth \$1 a ton in the ground, the Cuban ores owned by the Pennsylvania Steel Co. and the Bethlehem Company, considering their exceptional quality, ought to be worth equally as much. The 600,000,000 tons owned by each of these companies very probably cost in the aggregate, including exploration and development work, some \$2,000,000 or \$3,000,000 each, but supposing that they may have cost \$5,000,000 each, is not the profit between \$5,000,000 and \$600,000,000 for each company sufficiently great without asking the Government to add additional value by reducing the duty? Was not Mr. Carnegie right in saying "they are going to make a great fortune out of their ore?" Really, \$600,000,000 for each company is a "great fortune" even when measured by Mr. Carnegie's standard.

#### ENCOURAGING RAILROADS IN TEXAS.

Illustrative of the changing sentiment in the country toward railroads is the fact that communities in Texas are offering bonuses for railroad construction. It is significant that an article on another page of this week's issue of the MANUFACTURERS' RECORD from Mr. Albert Phenix, our special correspondent, dwelling at some length and in detail upon railroad projects in that section of the country, opens with the announcement of the \$100,000 bonus which has been offered by the Business Men's Club of San Antonio to any responsible railroad builder who will construct a line between San Antonio and the lower Rio Grande Valley in the vicinity of Brownsville. In that section, as Mr. Phenix points out, is an extraordinary activity in irrigation enterprises which are attracting immigration to an extent that has hardly been witnessed in other parts in recent years. The opening up of a vast area to agriculture through this irrigation calls for greater transportation facilities for the marketing of products and the bringing of the farms into convenient touch with centers of manufacturing and commerce. Hence the anxiety of San Antonio's

business men to have that railroad and to show forth their faith in the enterprise by putting up a cash inducement for the building of it.

How things are moving in that section is suggested in the information given the MANUFACTURERS' RECORD by Judge J. D. Scruggs of Menardville, about 120 miles northwest of San Antonio as the crow flies, that the people there have raised a bonus of \$58,000, and with that is offered a right of way through the county to the first railroad building to the town, which, at the census of 1900, contained less than 400 inhabitants. These are but a couple of the indications that the politics that depends for success upon agitation against the railroads is losing caste in Texas. It never would have succeeded in checking the natural growth of that great Commonwealth had the people not had too much confidence in their supposed leaders. That confidence has been shattered by the facts of the last few years, which have been emphasized in the campaign made under the auspices of an organization of the secretaries of the business bodies of the State for sane and reasonable treatment of corporations and for the growth of the conviction that the healthy interests of the railroads and the people are inseparable. When that conviction has reached its full limits the 13,000 miles of railroads in Texas will have grown to 40,000 miles.

#### ALCOHOL FROM SAWDUST.

Manufacture of ethyl alcohol from sawdust is the rather startling prospect presented on another page of this week's issue of the MANUFACTURERS' RECORD by G. U. Borde, an engineer of New Orleans, who is now designing two plants, one for the State of Washington and one for Ontario, Canada, to enter upon the process. In an article on the saving of waste of all kinds in lumber operations and the utilization to the full of all material Mr. Borde tells of his recent visit to France, where the industry is upon a commercial basis and where he had opportunity to make experiments in it himself. The results of his experiments may be condensed as follows:

From every 3200 pounds of green sawdust, equivalent to one long ton of theoretically dry wood, he obtained 21½ gallons of 188-degree-proof alcohol, equivalent to 38.6 gallons of proof alcohol; 76 pounds of acetic acid, and three-quarters of a ton of a refuse, which the English and French are manufacturing into stock food. Because of the incompleteness of the plant where the test was made by Mr. Borde, the best results were not obtained. He estimates that from every 3200 pounds of green sawdust one may obtain, at a cost of \$7.30 gallons of 188-degree alcohol worth \$12.76 pounds of acetic acid worth \$4.56, three-quarters of a ton of stock food worth \$17.25, or a total of \$33.81, a net profit of \$26.81.

When one considers the millions of tons of sawdust and other waste of the lumber industry that is burned to get it out of the way, this opportunity for wealth in waste through the derivation of alcohol and other valuable products opens up a prospect possibly not even equaled by that which came upon man when he ceased to pour his cottonseed into the nearest stream and made the seed the basis for an industry which in only 40 years has reached an annual output valued at more than \$100,000,000.

No one need fear that the new industry will result in too much alcohol. The value of the use of alcohol for an



economical fuel has been demonstrated successfully, and about the only restriction upon the use of it is inability to get it in sufficient quantities at a reasonable cost. The opportunities for its use are increasing just as is increasing the realization of the necessity for scientific handling of other fuels, such as coal and petroleum. The alarm over the fuel situation, which an exaggeration of the conservation idea has developed, ought to subside at the prospect of millions of gallons of alcohol from the despised and rejected sawdust.

#### THE TARIFF ON LUMBER.

We are sure that Congressman Joseph E. Ransdell of Louisiana has not had his attention called to one use of his name as a member of the advisory committee of the so-called "National Forest Conservation League" of Minneapolis. This conviction is borne in upon us by the fact that the stationery of that organization bearing his name as a member of the committee is being used in an effort to induce the Congress of the United States to abolish the tariff upon lumber. The literature deals in the most reckless manner with talk about a lobby at Washington working for the maintenance of the tariff on lumber. This literature, with its subsidiaries by way of "farm papers" within a day's journey of Minneapolis, cost a considerable sum for its distribution. If its purpose, ostensibly for the benefit of farmers and for the conservation of our forests, should be carried out, about the only persons to be benefited would be the owners of timber lands in Canada. The MANUFACTURERS' RECORD protests against the use of Congressman Ransdell's name in this connection because he is on record as being absolutely opposed to the real purpose of the propaganda sought to be furthered by the literature. Congressman Ransdell is opposed to free lumber. In his statesmanlike speech in the House of Representatives on April 2 he said:

I am enthusiastically in favor of preserving all our natural resources, especially the forests, for I believe that on their conservation depends the ultimate future of our nation, and I would gladly assist in any legislation, State or national, that would promote that end, but I do not believe free lumber will accomplish it.

The broad question for us to determine is what would be the effect on the nation at large of free lumber, and whether or not it is desirable to maintain a duty thereon. I am decidedly in favor of the Dingley rate of \$2 a thousand, about 11 per cent. ad valorem, and shall state my reasons as briefly as possible.

Much of the clamor for free lumber comes from sections which have exhausted their supply of timber, and, being no longer able to reap profits from the protective rates which they once enjoyed so much, they care nothing for the West and South, and insist upon a removal of the duty, in the hope that they can get their lumber somewhat cheaper. A number of these men have also invested heavily in Canadian timber, and they wish to sell it here without restraint, regardless of the effect upon American industries.

Shall we listen to such appeals and refuse to place the great lumber business of the union, which employs 600,000 men at an annual wage of \$200,000,000, and whose output is \$600,000,000 a year, all of which is spent in America in purchasing the products of our farms and factories, at least on a par with other forms of industry?

No; not on a par, but much below them. The lumber tariff is the lowest on the schedule. The present duty on lumber is \$2 per thousand feet, or about 11 per cent. ad valorem. This is the lowest duty of all items on the tariff schedule, which average about 43 per cent. All items entering into the manufacture of lumber are afforded several times more protection than lumber itself. The principal consumer of lumber is the farmer, and the best consumer the

farmer has is the lumberman. Never before in our history would a bushel of oats, corn or wheat, or a ton of hay, a team of horses, or a hundredweight of live stock, buy more lumber than today. While some grades of lumber have advanced from 20 to 60 per cent. in the last 10 years, the price of most farm products has advanced a great deal more.

Would it be a square deal to reduce this 11 per cent. duty to 5½ per cent., as proposed by the pending bill, or to lop it off entirely, as some suggest? I cannot think so. This duty is not a prohibitive one, as are so many schedules of the present law, but it permits an importation from Canada of nearly 1,000,000,000 feet of lumber a year, on which the duty is about \$2,000,000; hence it is not merely a protective duty, but an actual producer of a very respectable revenue.

Those utterances indicate pretty clearly that Congressman Ransdell cannot possibly sympathize with any attempt to use the "National Forest Conservation League" to promote free trade in lumber. The MANUFACTURERS' RECORD never heard of this league until it began some months ago to circulate literature in favor of abolition of the lumber tariff. We have no doubt that the men prominent in organizing the league acted in perfect good faith, and, if the use of Congressman Ransdell's name was authorized by him to be used in that connection, we are sure that he never suspected that the league would be used to promote such a special scheme as that behind the free-lumber agitation.

We are sure that, now that the matter is thus called to his attention, he will repudiate such using as it deserves to be repudiated. The incident emphasizes the evils inherent in so many of the organizations with which this country has been cursed within the past few years. In the past 10 or 15 years there have been organized more leagues, associations, societies, committees, commissions, etc., for alleged civic, economic, educational or philanthropic purposes than were organized in the whole world probably in the 150 years preceding. Knowledge of the origins of many of these organizations revealed in their subsequent manifestations prove clearly that essentially they are devices for turning good purposes, however misdirected, to the account of slick individuals seeking salaries requiring little exertion or little equipment save the exertion of one's jaws and lungs and the ability to hypnotize by words or of special interests of one kind or another, trying to capture by deceit a popular following that never could be caught by force. Most, if not all, of such organizations are readily able to induce any number of eminently respectable and well-meaning men and women to permit the use of their names to give them a standing with the equally unwitting public and even to contribute funds for the salaries of the real organizers who speedily come to the front in the real executive positions, and who act safely upon the presumption that boards of managers or directors are willing in a vast majority of cases to be the victims of the individuals whom they pay to relieve them of responsibilities. Most of the men and women whose names decorate the literature of these various organizations are unaware not only that there is often a community of interests among the actual workers under the screen of organizations, apparently unrelated to one another, but that through these same apparently unrelated organizations runs a common purpose, promoted financially from a common source, but to be paid for ultimately by the great mass of the people whose eyes have been wooled through the organizations.

#### FOR INQUIRERS ABOUT THE LATE SOUTHERN COMMERCIAL CONGRESS.

From a friend in the Central South who is interested in the late "Southern Commercial Congress" the MANUFACTURERS' RECORD has received a letter asking some questions about that scheme. In the course of the letter our friend writes:

Do you believe that the plan is utterly bad, or do you believe that it is weak in some points and that with amendments in those points it might be made effective?

Again, if this plan should be successful, are we to understand that its very success would be detrimental to the South? I can understand how, if it should fail, it would have a bad influence on the future, but the question which now concerns me is whether, if it should succeed, which I believe is possible, would it have a good or a bad influence?

I have always had the greatest respect and admiration for the work which the MANUFACTURERS' RECORD has done for the South. It has been the means of correcting many false impressions and of disseminating much very valuable information. I do not now take the position that it is wrong in this matter.

For the benefit of other inquirers we embody here the gist of our reply to our latest correspondent on this point.

As to the late "Southern Commercial Congress," we believe that the plan evolved from it is absolutely worthless as far as the welfare of the South is concerned, and we cannot understand how any business man acquainted with the methods by which promotion of the plan has been attempted can hope for any possible benefits to the South from the success of the plan. We called attention to its uselessness in January in reply to a request for criticism from a gentleman interested in the congress, who said that friends of ours had asked him why we opposed it, but who has never been willing to give us the names of those friends. Discussing then the prospectus as to the value of the permanent headquarters at Washington of the congress in inducing the immigration to the South of capital and men, we made these points:

The great mass of folks who go to Washington do not seek there information about chances for homes or for investment. They are on pleasure bent, are seeking political jobs for themselves or for others, aspiring to shine in the ephemeral light of social distinction dependent upon this or that administration, or for the furtherance of measures requiring Congressional action or Government influence.

Successful business men of other sections who wish to attract attention to their sections know that the best kind of convention, if they must have one, is the convention held within their sections, held with a definite, well-defined purpose that appeals to business instincts and not permitted to be used as promotive of personal ambitions or of extraneous schemes.

Persons seeking homes in the South will not go to Washington to learn about the South. They will go to the parts of the South where they propose to make their homes.

Capital seeking investment in the South will not consult "a Perpetual Southern Exposition" at Washington. They will either investigate on the ground in the South the contemplated propositions or employ an expert to investigate for them. Both home-seekers and capitalists will depend for information directing their movement to the South upon first-hand and long-established sources, and not upon the second-hand rattlings of a Bureau of Publicity at Washington.

Illustrative of methods are the apparent contradictions in the statements preliminary to the campaign for a million-dollar endowment of the Southern Architectural Monument at Washington. Announcement was made at Washington on December 11 that \$300,000 had been pledged for the endowment, and at Montgomery, Ala., on December 18, under a New Orleans date

line, that \$150,000 more had been pledged, but at Atlanta one month later that "pioneer contributors" had then and there subscribed \$23,000. What of the alleged pledges of \$450,000 a month earlier? These announcements were akin to those bearing upon the site of the Southern Architectural Monument. In an offer to give the MANUFACTURERS' RECORD the first complete statement of the purpose of the promoters of the scheme we were told from Washington, under date of January 13, that the site for the monument, which was to cost \$1,000,000, had been purchased for \$500,000 and paid for in cash. At the same time the president of the congress was quoted at New Orleans in the true statement that merely an option had been obtained on the site, and yet five days later the official statement was made at Atlanta that the site of the proposed building had been obtained. It would be a difficult matter to discover from the statements about the site subsequently made at or from Washington exactly what the status of the site acquisition is.

Omitting mention of interesting phases of banquets that had been held, and a mass-meeting that was to have been held, but was not; of the verbiage strewn *ad infinitum* at Washington and in a few Southern newspapers relying upon matter furnished them from Washington as other illustrations of methods, we turn our thought to the dangers inherent in the success of the plan. These were emphasized when President Finley, at one of the banquets in promotion of the congress, suggested that the congress might be efficient in forming public opinion as to those economic policies which are essential to prosperity. We then said that most of the organizations which during the past 10 years or more have attempted to become interpreters or representatives of the South have, after one or two conventions, congresses or parliaments, become the mere skeletons of names under which has operated a small committee which itself leaves "executive" work to a single individual. What has been can be, and we added:

Granted the impossibility that the vast body of Southern men who are practically interested in all that concerns the real vital interests of the South could gather in convention once, appoint a permanent working committee composed of actual representatives of Southern material progress, and select for that committee as its executive officer some man thoroughly identified with the South, who has actually had opportunity to become acquainted at first hand with the resources and opportunities of the South, with its needs and aims, a man whose antecedents are known and convincing of his capability of making others believe in the South, the work of the convention would be for naught. The man having the qualifications for the executive office would be too valuable to be held by any salary that the aggregate business body of the South could offer him.

Granted the possibility—and the thing has happened—that with the best intentions and most disinterested motives there could be established at Washington or elsewhere a body with a semblance of authority to voice the call of the South, what might not happen? In literature circulated in advance of the latest Washington banquet—the third, we believe, of a series of banquets promotive of the "Southern Commercial Congress"—there was uttered in advocacy of the establishment of a Southern bureau at Washington the argument that "Washington is the great center for European influence," and that "foreign Governments which now advise their citizens against moving to the Southern States will learn through their agents at Washington what the real conditions are and what the scope of Southern opportunities really is." It would be interesting for the public to be accurately informed about the foreign Governments which now advise unreservedly their citizens against moving to the Southern States. Our impression is that the agents of foreign Governments who would seek to use the voicing of the call of the



South through the bureau would be the agents of foreign Governments that have during the past few years, in more or less conjunction with steamship companies, sought to dump their citizens upon the South. Men of any country whose Government aids them to get away are not the kind of men that the South wants.

Again, suppose the voicing of the call of the South should take the form of expressing a desire on the part of the South to fall in with the scheme of shunting the refuse of large cities of the East upon the South in the guise of immigrants, what redress would the South have if it had countenanced such an undertaking at Washington? Only the other day an agent of the National Government was quoted to the effect that "what promised to be a movement to divert [to the South] the alien tide from the congested centers about New York has been ruined." Maybe it has and maybe it has not.

Or, again, suppose the voicing of the call of the South should fall in with the scheme, which some Southern men, indeed, are supporting, of preventing the proper solution of the negro problem by keeping the negroes massed in the South, what could the South do if it had permitted the country to believe that the bureau at Washington had any authority to speak for the South?

In conclusion, we call attention to the fact that there are too many lobbies operating between New York and Washington with intents upon the South for the South to encourage the establishment at Washington of any organization assuming to stand for the material interests of the South which may, in spite of the enthusiasm and good faith of its members, become unwittingly, and to the great injury of the South, a victim of any one of the alien lobbies.

#### ADVANCE IN PRICES OF FARM PRODUCTS.

From 1892 to 1896, when economic laws that are more powerful than the work of speculators, more powerful, in fact, than Government statutes, brought about starvation prices for farm products, when corn and wheat and cotton and cattle were selling at less than cost, our land was full of denunciations of the wicked people, the bankers and the trusts and the gamblers who had conspired to ruin American farmers. Press and pulpit, college presidents and men who ought to have been able to take a sane view of economic forces were wild in their bitterness and vied with each other in their efforts to arouse class hatred.

With the next swing of the pendulum, working under the same economic laws—laws that, like the mills of the gods, grind slowly maybe, but grind with exactness—prices of farm products advanced. This advance was inevitable. It could not have been materially hastened or retarded though all the speculators or gamblers, so-called, in the world had suddenly been called away from this earth to some other. Unaided or unretarded by "bulls" or "bears," these economic laws would have gone on working out their ends just the same. When a few years ago cotton commenced to advance from the low prices which had prevailed for a long time, Gen. M. C. Butler of South Carolina, in an interview, outlined the conditions that had brought about this advance in cotton and why it was legitimate. Secretary of Agriculture Wilson promptly rushed into print with a criticism of General Butler's statements and claimed that this advance was simply due to the work of gamblers in cotton. He said that if his position was not proven correct during the next few months, in which time he was sure cotton would decline, he would walk from Washington to South Carolina in order to take off his hat to General Butler and hail him as a true prophet. The MANUFACTURERS' RECORD on several

occasions reminded Secretary Wilson that though cotton continued steadily to advance, and though the world accepted that this advance was founded on economic laws, though time had proven General Butler to be absolutely correct and Secretary Wilson absolutely wrong, since cotton did not decline as he had predicted, we had been unable to hear of his taking the tramp to South Carolina.

Once again Secretary Wilson, with the official authority of his Department back of him, undertakes to decry an advance in farm products, this time in grain, claiming that the gamblers are responsible for it. For all that we know to the contrary, the Chicago speculator may be a great gambler who has played his cards well. We are not attempting any defense of him. But he and his work are only incidents. He has not made conditions—he has only interpreted them. He is simply an expression of a movement that is infinitely greater in power than he, with all his millions, real or imaginary. We do not undertake to say whether he has cornered the market, and whether, in doing so, he is a gambler or not. The same economic laws that put up cotton and again temporarily depressed cotton, that advanced the price of corn and oats and other things, have brought about higher prices for wheat. The Chicago speculator is credited with having cornered the market and brought about a world-wide advance. In this he is credited with far greater ability than he possesses. But to the point.

When farm products were low and farmers were literally bankrupt, when agriculture was at its lowest ebb and the people of the country were rushing to the cities in order to find some means of making a bare living, the mouthing orators, and, to their shame be it said, some ministers, densely ignorant of what they were talking about, preached the gospel of hate to the so-called "money power," claiming that this great money power, whatever it may be, was crushing the life out of farmers. The bankers, gamblers and speculators, all classed as the money power, were said to be in collusion with Europe in order to destroy the value of American farm products.

It has been everywhere proclaimed that the one thing needed in the agricultural life in America was to make farming more profitable. With the rise in the price of wheat and cotton and corn and cattle and hogs and sheep and eggs and chickens farming has become more profitable. During the last six or seven years of better prices for farm products hundreds of thousands of farm mortgages have been paid off and billions of dollars of indebtedness wiped out. The burden of appalling poverty has been lifted from millions of farmers and members of farmers' families. A blessing of far-reaching importance has come to American farmers. Civilization itself is being advanced. Schools and churches are being put on a higher plane of usefulness because of the higher price of farm products. But the same class of would-be orators, just as ignorant of economic laws now as they were 10 or 15 years ago, are now claiming that the higher prices are a curse and denouncing the money power and the gambler and the speculator for bringing woe upon the public through the advance in the value of agricultural products. But the farmer chuckles to himself, and as he contemplates the home that is free from mortgage, as he realizes his ability to paint the long unpainted house, to buy new furniture

and better clothes and new agricultural implements, he feels like singing the doxology. To those who are denouncing the advance in the price of farm products, he says: "Go to, thou ignoramus; the high prices are making our hearts glad and bringing to us some of the comforts of prosperity which the city dwellers were enjoying when they bought the result of our labors at less than actual cost." And the farmer is right. His prosperity is now widespread. His prosperity means untold blessings to the country. It means checking the cityward flow of population. It means that the farmer can again live in comfort, and the farmer knows more than the college presidents, more than the orators and speculators, more than Secretary Wilson about the subject. He knows that economic laws, and not speculators, are causing the pendulum to swing his way. May this prosperity continue to increase and to extend to the North, to the South, to the East and to the West until the American farmer shall be the envied of the people of the whole world.

#### TIRED.

It is regrettable that the foresight of the first president of the University of Virginia as to that million-dollar endowment was not as keen as his hindsight. In closing up the transaction as far as the money-getting is concerned, he said:

"The president of an American university ought not to be required to raise money as a business and under contract, so to speak, and, God helping me, I will never again undertake just such a task as this. The silences and reserves of one's soul and character are too precious to expend them in just this way too often."

Relegating to the female worshipers of Eddie Bok the inspiration of the second sentence in that paragraph, and pondering upon the words, "under contract, so to speak," one may well ask, Was the job such a difficult one, after all, in view of the significance of its part in linking "the University of Virginia, with all its traditions and its powerful influence upon Southern thought, with the movement for the democratization of education?" For the great bulk of it came from a small group of men rather closely allied, and comparatively few other persons were represented in the remainder, which, according to figures that have been given out from time to time, must have brought the total to something more than a round million.

Following the election of the first president of the university, Andrew Carnegie offered for the endowment \$500,000, on condition that a like amount should be raised. Of the other \$500,000 or more John D. Rockefeller gave \$100,000; his General Education Board, out of its \$43,000,000 trust, \$59,000; the treasurer of the Board, \$10,000, and another member of the Board, \$1000; Oliver H. Payne, \$50,000; Charles H. Seuff, \$25,000; Thos. F. Ryan, \$25,000; Charles Steele of J. Pierpont Morgan & Co., for himself and others, \$80,000, and Robert Bacon, \$10,000. From that little group came a total of \$860,000.

Another \$50,000 came from a grandson of Thomas Jefferson, and \$5100 from "numerous alumni." Of the other contributors, either individual or organized, one gave \$30,000, two \$20,000, three \$10,000, one \$9000, four \$5000, one \$2500, one \$2000, and seven \$1000 each, in round numbers.

From nine sources came more than four-fifths of that endowment of an institution supposed to stand for democracy in education. Aside from the preciousness of "the silences and reserves of one's soul," is it

possible that such an endowment can be for the best in education? For democracy in education, if it means anything at all besides wordings, means the support in independence and self-respect of educational institutions by the people who founded them and who are to be most affected by them.

Is not the lesson in the university exceedingly timely for a batch of other institutions of "higher education" in the South struggling to make good the conditional offers of money from the Rockefeller-Carnegie combination? Or has not the performance justified a gift to the University of Virginia of \$5,000,000 or \$10,000,000 from that last conditional \$32,000,000 entrusted to the General Education Board, thus rounding the thing out, with or without a "contract, so to speak?"

#### OPEN-HEARTH PLANT PROBABLE.

It is reported that the Maryland Steel Co. is contemplating establishing in the near future, at a cost of about \$1,000,000, an open-hearth plant at its works at Sparrows Point, Maryland. The plant, it is said, will consist in its initial capacity of four 40-ton Campbell type furnaces, which will be operated in connection with the Bessemer plant.

Ever since the Pennsylvania Steel Co., of which the Maryland Steel Co. is a subsidiary, acquired enormous additional ore deposits in Cuba, estimated at 600,000,000 tons, it has been expected that some steps would be taken looking to the enlargement of the Sparrows Point plant.

To utilize this ore, which is different from that of other Cuban ore deposits, it has been found necessary to briquet it, and while the main briquetting plant will be in Cuba, one on a smaller scale is now about completed at the Sparrows Point plant, and it is expected that the first shipment from the new ore beds will shortly be made, when the new plant will be started.

#### THAT LEE PRIZE ESSAY.

In closing its discussion of the regrettable award for the prize essay on Robert E. Lee, the *Confederate Veteran* of Nashville truly says:

"The entire South agrees in its condemnation not of Miss Boyson or the opinion she held, but of the acceptance of these opinions by Southern judges."

The essayist would hardly have figured in the discussion of the award had not the defense of the award sought shelter behind the essayist's skirts. But the refuge could not conceal; the skirts were sheath in effect. The official judgment was indefensible.

#### THE COTTON MOVEMENT.

In his report for April 16 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 228 days of the present season was 12,192,126 bales, an increase of 1,973,448 bales over the same period last year. The exports were 7,218,341 bales, an increase of 729,359 bales. The takings were, by Northern spinners, 2,271,361 bales, an increase of 851,673 bales; by Southern spinners, 1,824,174 bales, an increase of 117,305 bales.

#### NO "PREJUDICE."

If Robert C. Ogden and Booker T. Washington, associates in education of the South, had only accepted appointment on the commission to Liberia, neither would have required a separate war vessel for the trip.

The proceedings of the tenth annual convention of the National Builders' Supply Association, held last February at Louisville, Ky., have been published in attractive pamphlet form.



## Deriving Ethyl Alcohol from Sawdust

By G. U. BORDE, M.E.

[Written for the Manufacturers' Record.]

I have just returned from Europe, where I went to investigate the manufacture of ethyl (grain, not wood) alcohol, acetic acid and stock food out of sawdust.

In France I found that there was a company organized, the aim of which was to control the entire output of the sawdust in France, which, by the way, is only the equivalent of wood waste given out by one of our sawmills having a capacity of 750,000 feet board measure per day.

One of the principal stockholders in this concern is a large distiller and exporter of French cognac in France, and his object in having the control of this company was to have the exclusive right to the alcohol made from the sawdust, so that he could use it in the rectification of brandy. He exports largely to England, to the balance of Europe and to the United States. Up to the present time he had been using alcohol made from beet sugar for the rectification.

Samples of the alcohol submitted to the experts in the Alcohol Exchange of Paris were declared to be equivalent, if not superior, to the alcohol distilled from grapes. So much for the quality of the product.

The process used is one discovered by Dr. Alexander Classen of the Polytechnic School of Aachen, Aix la Chapelle, Germany, in 1900. He found that he could convert the cellulose existing in all woody fiber into a fermentable sugar by cooking the wood under pressure in the presence of sulphurous acid, and, by fermenting the sugar thus formed, obtain ethyl alcohol. This process he patented all over the world, but his original methods were crude, and the French people, after having purchased the patent rights for France, set to work to develop the process commercially. They changed the design of the apparatus suggested by him for the conversion, and in further experimenting found that, in addition to the sugars formed, a paying quantity of acetic acid was created at the same time, and in their process they have made arrangements to extract the acetic acid as well as the alcohol.

At St. Marcel I found one of their plants in the course of construction, and they kindly turned the same over to me for experimenting. There had been shipped from the South 20 tons of cypress shavings and 20 tons of long-leaf yellow-pine sawdust, and from Chicago 20 tons of mixed hardwoods. While I said the plant was in course of construction, enough of the apparatus was there to carry the process through successfully, but enough of the plant was missing to prevent me from getting an absolutely accurate estimate of their cost of manufacture.

It makes practically no difference what kind of wood is used for the manufacture of alcohol, as all yield the same amount of alcohol per ton of wood. Oak, however, on account of the excessive amount of tannic acid which it contains, and which is a foe to fermentation, has to go through an additional treatment for the elimination of the tannic acid before it can be fermented and its sugars converted into alcohol.

In a general way the process in this plant is as follows:

The sawdust, which is drawn from a radius of about 75 miles from the plant, is put into a digester, and a predetermined amount of water and sulphurous acid is added. The digester is closed and sealed; external heat is applied until the pressure inside reaches about 100 pounds, and is kept at this pressure for a certain length of time, during which the cellulose in the

wood is converted into dextrin and other sugars. The heat is then cut off and the usual sulphuric acid, which has been put into the digester simply to get the pressure to the required point, is reclaimed; the material in the digester, which has shrunk about 25 per cent., is then passed over to the separator, in which the acetic acid, formed during the conversion, is vaporized by means of a steam jet and then collected. The converted sawdust is then brought over to the mash tanks, where its acidity is neutralized, and is made into a mash which is fermented and distilled in the same way that an ordinary grain mash is handled in a whiskey distillery.

The tailings from the still are first compressed to extract the water, and the final amount of moisture is taken out in a drier heated by waste gases from the boilers. These dry tailings in France and England are made into stock feed or brickettes, or by the addition of a small amount of magnesia are compressed into an artificial fireproof stone which has a crushing strength of 18,000 pounds per square inch and a tensile strength of 6000 pounds.

Other experiments are being carried on at present for further results from these tailings, and while not at liberty to make public what these experiments are, I venture to predict that there is a good deal more in the tailings than has so far been gotten out of them. The results obtained from the wood shipped from America were as follows:

For every 3200 pounds of green refuse, which contains about 30 per cent. moisture and is the equivalent of one long ton of theoretically dry wood, I obtained 21½ gallons of 188-degree proof alcohol, which is the equivalent of 38.6 gallons of proof alcohol. By experiment in the laboratory we found that this yield should have been about 10 per cent. higher, which loss was probably due to our inexperience in handling the apparatus.

In addition thereto will be obtained 76 pounds of acetic acid and three-quarters of a ton of refuse, which the English and the French people are manufacturing into stock food.

The French chemist of the concern claims that under proper manipulation of the apparatus, and when everything is in working order, they do from their wood, and we should from our wood, obtain 30 gallons of alcohol per ton of sawdust.

It is estimated that for every ton of theoretically dry wood, or, in other words, for every 3200 pounds of green sawdust, one should obtain:

30 gallons of 188° alcohol at 40 cents.....	\$12 00
76 pounds of acetic acid at 6 cents.....	4 56
¾ ton of stock food at \$23.....	17 25
	\$33 81
Which, less estimated cost of production, 7 00	
Nets.....	\$26 81

which, if one takes into consideration that 1000 feet board measure of green lumber is the equivalent of one and one-quarter long tons of theoretically dry wood, would make the net return per 1000 feet board measure \$33.51.

This to the skeptic may sound like a wild dream, but the facts given in this article are based on actual observation. Some people who have had occasion to look into this matter further have determined to go ahead and erect plants for the manufacture of wood waste into alcohol, acetic acid and stock food, and I am at present designing one plant to be erected in Hadlock, Washington, having a capacity of 50 tons of sawdust per day, and one to be erected in Ontario, Canada, having a ca-

capacity of 100 tons of sawdust per day. These plants I hope to have in successful operation by the first of the year, and the day will then not be far distant when it will pay the sawmill owners to go more deeply into the question of economy of waste material in the woods, as well as waste of power in the plant.

If you figure that so-called wood waste returns only \$10 per ton instead of \$26.81, and that it takes at least two tons of wood waste to equal one ton of coal in the production of steam, the sawmill owner will have to admit that the time to economize has arrived.

The fact that fuel has, up to the present time, been of such little importance to the manufacturers of lumber seems to have operated against any study of economy on the part of the owners of sawmills as well as against the application of sound engineering principles on the part of the manufacturers of sawmill machinery.

A visit to almost any sawmill in this country shows a wastefulness that is almost criminal. Beginning in the logging camp, the timber is sacrificed; a large part of the tree is left on the ground, and nothing but waste in one form or another is seen at every step from the time the first tree is felled until the manufactured product is put on the cars.

In the mechanical equipment of any sawmill one will find that at least one-third of the cost of installation is made up of shafting, boxes, pulleys and belting. The most uneconomical engines built have been selected to operate the plants, and I do not think there is a single sawmill at the present day that is not obscured from view by a cloud of steam. This necessarily represents a large amount of wasted power.

By actual test in sawmills that I have had occasion to investigate I have found that 30 per cent. of the entire power developed by the main sawmill engine is being wasted in turning over shafts and countershafts to deliver but a very small percentage of its power at distant points. Another 25 per cent. is wasted in running twisted belts, bevel gears and frictions, mule pulleys, etc., which, if eliminated, and they could be by the use of electric motors, would have decreased the original investment in engine and boilers by at least 50 per cent., and the saving in the original investment in the sawmill machinery, by eliminating all of the unnecessary countershafting and belts, would have decreased the investment in that particular branch by at least 25 per cent.

It is true that the use of electricity would increase the original investment in machinery, on account of the use of high-grade apparatus, still it would increase this investment along the line of machinery on which the maintenance and depreciation is very slight, and would eliminate entirely that portion of the investment on which the maintenance and depreciation is excessively great.

It is a well-known fact that maintenance and depreciation on boilers and their accessories is not less than 25 per cent. per annum, and that the depreciation and maintenance on countershaft and belts in the ordinary sawmill is just about the same.

The amount of money spent for oil and belts annually is quite an item in the operating expenses of a sawmill. This alone would, by the use of electric motors throughout, decrease the expense for belts, oil and oilers by at least 90 per cent., while the maintenance and depreciation of electric motors would not be over 7½ per cent.

Then again, by doing away with the excessive amount of shafting required in any plant operated by steam engines, it

would be possible to decrease the height of the lower floor of the sawmill, and thereby at a smaller expense build a much more substantial building. This decreased height of the saw floor would decrease the cost of the trams throughout the yards, as well as the cost of all other buildings connected thereto, and if overhead electric transfers were used throughout the mill property the trams themselves could be entirely eliminated, the maintenance of which alone amounts annually to a large amount.

The use of overhead electric transfers throughout the mill would eliminate the mule and his attendant, and the saving of the feed alone would amount to quite an item at the end of the year.

The use of individual motor drives would eliminate the terrific strain on the building supports, as there would be no shafting attached thereto, and would thereby increase the life of the building, therefore decreasing its maintenance and depreciation.

I have had occasion to inspect a certain sawmill not over 20 years old, in which the boiler and engine plant has been increased on five separate occasions, without there having been added a single piece of machinery, requiring more power than the original installation, and this increase in power was due entirely to the racking of the building. In fact, today whenever a log goes through the mill one can readily imagine a steamer at sea in a storm.

Then again, take the question of the transfers between the sorting chains and the kilns. Under the present system a very uneconomical engine is located about the center of the transfer with a rope drive passing over sheaves attached to the transfer cars. It requires one man to operate the engine and another man to be on the transfer car, so that it can be stopped at exactly the point required to take the kiln cars on or off. When an electric motor is used it is placed on the transfer car, and the man operating the motor can gauge his own stoppages. In addition to the saving of this man, there would be the additional saving of not only the steam lost by condensation in the long run of pipe from the boiler to the transfer engine, but the motor would develop one horse-power on about 18 pounds of steam, against the present development of one horse-power for 100 pounds of steam, in this way further decreasing the boiler capacity required and the consequent expenses.

Then again, by the use of individual electric motors, driving each piece of machinery separately, it would be possible to operate any portion of the plant independently of any other portion. It would not be necessary to shut down more than one machine to change saws, or when it comes to the question or cleaning up it would be possible to run the conveyors or any one conveyor at the will of the operator.

The factor of safety both of the machinery and of the operatives is increased fully 100 per cent. Should any accident occur to any piece of machinery, that individual machine could be shut down instantaneously by the operator in charge in ample time to save life or property, or both, as the case may be.

By eliminating the shafting and belting, which not only interferes with the proper distribution of light and air, you remove any limit to the location of your machinery. The machines can then be placed in any sequence desired, and thereby avoid the necessity of rehandling the lumber, with its attendant expense, damage and congestion. It can be readily demonstrated by laying out a plant with electric motors; the amount of floor space required

is greatly reduced, and therefore the original investment in the building is reduced in proportion.

In a steam-driven sawmill, operated by an engine, it is almost an absolute certainty that any time a belt slips off it is destroyed before the main engine can be shut down.

I can cite a case in which this accident cost the owners \$3500 in cash, without injury to any employee, to say nothing of the time lost in the delay.

Then again, should it become necessary to shut down the entire sawmill instantaneously, it would be possible to do so by using remote control switches located conveniently at one or any number of points throughout the entire plant, without having to depend upon the engineer in charge of the engine-room.

The item of insurance is materially reduced on account of the remarkable reduction in the fire hazard. The absence of a lot of belts whirling around at high speed avoids the stirring up of dust and its settling in the roof trusses, where it is liable to ignite spontaneously, and the mill as a whole presents a much neater and cleaner appearance.

When all of these facts have been carefully considered, it will be found that there has been money wasted in the original installation of the sawmill, and this is due almost entirely to the fact that the sawdust, shavings and slabs have been considered of no value, and practically a waste product. I have known of cases where the owners have installed additional boilers to get rid of the so-called refuse, rather than install a slab burner.

Sawdust, shavings, slabs and tree tops, however, are no longer waste products. For years the scientific world has been considering the utilization of so-called wood waste. Today the products have assumed a commercial importance, and it may not be very many years before the lower grades of lumber will be considered as by-products, and what are today termed by-products be the principal aim of the owners of the timber.

New Orleans, La.

### GOOD BUSINESS IN IRON.

#### Purchases in the Birmingham Market Well Distributed.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., April 19.

There was not so much snap and vim in the iron market the past week as characterized the week preceding, but there was a good business transacted at fairly steady prices. The range of prices was from a \$11 basis to that of \$12 basis for No. 2 foundry. There were some good lots placed, and a fair part of the business went at the inside values. Sales of No. 4 foundry were reported at both \$10 and \$10.25. One lot was for 1000 tons, and another lot was for 700 tons. Delivery was for the first half of the current year. There were some good sales made on the basis of \$11.50, in which delivery ran into the third quarter. It is not given to all buyers to be supplied with third-quarter requirements on this basis, and they can count themselves fortunate in getting in on this basis. The purchases were very well distributed in the way of lots, and were made both by those of high and low degree. It just seemed as if the entire trade wanted some iron and went in and got it. You cannot say there is no life in the market, nor can you say there is acute demand; but you can say there has been a very fair demand. There is a disposition to suppress facts of the extent of the sales, and that is a handicap in estimating the volume. But it is a conservative estimate to say the sales for this month will aggregate around 150,000 tons. In this estimate is included the sales for forward delivery.

While reports are made that iron can be bought on the basis of \$11 for basis of No. 2 foundry, it is heralded that but one interest, and that the leading one, has an open price at this price value, which is about as low as one can place an order. But at this price all buyers are excluded except the consumers. And unless you are known, you must have a certificate of character as a buyer of iron to melt.

The Alabama Consolidated sold during the week around 8000 tons on the basis of \$13 and \$12.50, but it should be borne in mind that this make is usually sold at a premium over the regular grades.

One interest sold its entire make for this quarter on the basis of \$11, and might sell its make for the third quarter on the basis of \$11.50 for No. 2 foundry. While there is an improved condition all along the line, there is not that feeling of confidence that portends higher values at the moment.

The scrap-iron market has a healthier outlook, and some advance in prices is expected. The demand is better, and interest in the market has greatly increased.

As to the pipe market, four-inch pipe is finding buyers at \$23.50, and six-inch at \$22.50. There are several specifications from municipalities of consequence to come in, which will be priced as above outlined. The demand for small and medium-sized lots continues to be very good, and transactions are at the quotations as given.

During the week some orders came in from Mexico of magnitude sufficient to keep the steel mill going. It will continue to operate if sufficient orders come in to keep it going.

The Grandview Land Co. filed articles of incorporation last week to engage in the real-estate business, with offices in this city. The authorized capital is \$30,000, all subscribed and paid up. Colby J. Phillips is president, and A. A. Gambil is secretary and treasurer.

The Central Land & Mortgage Co., for a general real-estate business, filed articles of incorporation. The company will have its offices in Woodlawn. The authorized capital is \$10,000. Joseph W. Hood is president and treasurer, and John T. Hood is vice-president and secretary.

Building operations in the city show a gain of nearly 25 per cent. over the corresponding period of last year. For the quarter ended with March of this year the number of buildings authorized to be erected total 140, at an estimated cost of about \$160,000, as against 106 last year, at an estimated cost of about \$130,000.

The skyscrapers are making rapid progress in their erection, and so far the contractors are holding the record for work accomplished in the given time. J. M. K.

### LITTLE ROCK'S GROWTH.

#### Phases of Development in Arkansas' Capital City.

[Special Cor. Manufacturers' Record.]  
Little Rock, Ark., April 17.

Arkansas is keeping pace with other Commonwealths in the industrial and commercial march. The State has a commanding position in many respects. It sends early vegetables to the Northern cities; its apples go to the South as well as the North and East, and its peaches go to the North and West. It can feed Denver with rice and New Orleans with wheat and corn. Memphis takes its cotton, Chicago its stock and Philadelphia its wool and mohair. For exports it has a free waterway to one of the greatest ports in the country at half the distance that separates the Northwestern States from their seaports.

Spread out the map of the United States. Take a pair of compasses and place one foot on Little Rock, in the center of the State, extending the other to a point in Indiana between Indianapolis and

Louisville, the center of the population of the United States, only 450 miles distant. Now swing the compass to the south, and you will be in the Gulf of Mexico, far beyond New Orleans. Swing it to the north, in the great grain State of Iowa, and you are 1500 miles from the Eastern seaboard. In other words, the map shows that Arkansas is much nearer the center of population and the sea than is the grain region of the North. And note this: St. Louis and Chicago are the two great manufacturing and distributing centers of the Middle West, and no other rice and cotton State lies as near these points as Arkansas.

Little Rock, the capital of the State, had a population in 1880, including Argenta, of 13,138. In 1908, according to the Directory, it was 80,007. The bank clearings were \$71,022,888.86, against \$70,756,486.96 in 1907, a gain of \$226,101.90. In 1908 there were 259,150 bales of cotton received, against 186,320 in 1907. This statement, however, is out of line with cotton statements, as the years are figured from September 1 of one year to August 31 of the next year. In this connection it is notable that 183,555 bales were received from September 1 to January 1. This record almost equals the entire number of bales for 1907. The corn receipts were 4,864,000 bushels, against 4,050,000 in 1907; oats 1,143,000 bushels, against 1,411,000, and 69,000 bushels of wheat, against 75,000 bushels in 1907.

The real-estate market was not as active in 1908 as in 1907. In the year just closed 3258 sales were made, with a consideration of \$3,439,810, against 3789 sales, with a consideration of \$4,745,667 in 1907, the decrease in consideration being \$1,305,857.

Manufacturing industries increased considerably, and showed by unmistakable signs that railroads and river navigation are among the chief factors in Little Rock's growth. The building permits issued in March for work inside the fire limits were 14 in number, and covered improvements costing \$15,620. Outside the fire limits 83 permits were issued, reaching \$69,111. Twenty sidewalk permits were issued, covering 2829 linear feet of walk, costing \$1698. The total improvement cost reaches \$80,433; the total number of permits, including 188 excavation permits, reaches 305. The Capital Hotel has just been completed at a cost of \$350,000. Two large office buildings 12 stories high are about being completed at a cost of \$1,500,000, besides many other buildings, the cost of which will figure into the millions. At no time in the history of Little Rock have been such marked improvements taking place. Speaking of the growth of Little Rock, Mr. George R. Brown, the efficient secretary of the Board of Trade, said:

"The future of Little Rock is rosette with great achievements, not only along commercial lines, but in manufacturing pursuits as well. We are beginning to learn a little wisdom, and are applying our knowledge in the erection of such factories which will consume the most, if not all, of our raw materials. Municipal growth extends throughout the city in every direction, and our City Fathers are determined to leave nothing undone by which Little Rock may grow in keeping with her population. Building operations are greater than ever before in the history of the city, while manufacturing plants are springing up all around us and with good results. The manufacturers in the East are getting closer to the raw material, and in selecting Little Rock they are making no mistake. We look for a prosperous year, and all indications point strongly that way today."

ALEXANDER HELPER.

### CONNECTING MILL CENTERS.

#### Activity for Interurban Electric Lines in South Carolina.

[Special Cor. Manufacturers' Record.]  
Greenville, S. C., April 16.

There is every indication that the year 1909 will show a tremendous advance in all industrial enterprises in the South, and that the Piedmont section of South Carolina will get its full share of this revival of business.

The city of Greenville at this time is the center of the cotton-mill industry of the South, and is now being considered by financiers as an advantageous objective point for various electric lines. The necessary bonus to insure one of these lines has been subscribed. This line is to go to the top of Paris Mountain, nine miles. This will give Greenville a pleasure resort 2200 feet above sea level, besides developing the country and giving the people an accessible market for farm products. Another line, to Anderson, 37 miles, is an assured success, 11 miles on the Anderson end being now in operation. This line touches the great cotton mills at Piedmont, Pelzer, Williamston and Belton, and will serve 100,000 people. The business men are realizing that cheap and rapid transportation is an absolute necessity for the development of business, and are now lending their time and energy to securing proper financial backing for companies to furnish this transportation. The MANUFACTURERS' RECORD has been a great factor in the development of the South, and, in my judgment, can greatly aid in the upbuilding of this section by giving the subject of interurban railways for the South particular attention and investigation.

D. A. HENNING.

### The Virginia Bridge & Iron Co.

The Virginia Bridge & Iron Co., Roanoke, Va., advises the MANUFACTURERS' RECORD that its proposed branch plant at Atlanta is now under construction. Site has been secured on Whitehall street (main line of Southern Railway between Atlanta and Jacksonville), and the plant will have a monthly capacity of 500 tons of finished product of bridges and structural steel for general building purposes. The shop building will be of structural steel and practically fireproof, while the office building (fronting on Whitehall street) will be of frame construction. The shop equipment has been purchased, including a 10-ton locomotive crane, and will be driven by electricity. Foundations and grading for the buildings will be completed in 10 days, and the steel structure will be delivered in two weeks, so that the entire plant is expected to be ready for operation by May 15. At this new plant the company will have a large stock of shapes, plates, bars, etc., and will be prepared to make immediate delivery to purchasers in the Atlanta territory.

### Appalachian Engineers.

The Appalachian Engineering Association will meet in Roanoke, Va., May 8. The following papers will be read: "Lead and Zinc Ores in Wythe and Pulaski Counties," by Mr. M. M. Caldwell of Roanoke; "Organization and Engineering Difficulties of the Virginian Railway," by Major William N. Page of Washington, D. C.; "The Virginian Copper District," by Dr. Thomas L. Watson, State Geologist of Virginia; "A Geologic Engineering Code of Ethics," by Capt. Baird Halberstadt of Pottsville, Pa.; "Properties and Uses of Mineral Gypsum," by Dr. Frank A. Wilder of North Holston, Va. At a banquet in the evening tendered by the Chamber of Commerce of Roanoke President L. E. Johnson of the Norfolk & Western Railway and others will speak.



## REMARKABLE RAILROAD ACTIVITY IN TEXAS.

[Special Correspondence Manufacturers' Record.]

San Antonio, Texas, April 13.

San Antonio recognizes the needs of additional railroad facilities so keenly that a bonus of \$100,000 has been offered by the Business Men's Club to any responsible railroad builder who will construct a line between San Antonio and the lower Rio Grande Valley, in the vicinity of Brownsville. It had been expected that possibly the Frisco System would extend its line from Brady to San Antonio, and in that event would be in position to apply for the bonus by extending the road to Brownsville. At Brownsville the Rio Grande will shortly be bridged, the cost to be borne in equal proportions by the Mexican National lines, owners of two-thirds of the present ferry franchise, and the so-called Yoakum interests, the original syndicate of five that built the St. Louis, Brownsville & Mexico Railroad. Yoakum and associates have large holdings along the east coast of Mexico between Brownsville and Tampico. Along this coast for 50 to 75 miles inland there is a marvelous country, rich in forests, minerals (including petroleum), agricultural and grazing lands. A railroad from Brownsville to Tampico would open up this entire territory, and would shorten the distance—when the Mexico City-Tampico line is built—some 300 miles between New York, Chicago, St. Louis, etc., and the City of Mexico. Some day this road will be built by somebody to serve the overflow already started from the last American frontier of Southwestern Texas, and to many it would seem the logical conclusion that the Yoakum interests should undertake the work. However, the Mexican road between Mexico City and Tampico will not be built for two years yet, it is understood, and until that is done it is hardly considered likely that anything serious will be begun in the way of building the line from Brownsville-Matamoras to Tampico. On account of this situation, and of the difficulty of financing railroad undertakings here at present, Mr. Yoakum has intimated that he would rather hold the situation in statu quo for the present. He would like very much to build from Brady to Brownsville via San Antonio, but doesn't see his way clear to do so at this time.

One of the rumors in circulation is that the Yoakum and other interests, backed by New York and St. Louis capital, will build a 300-mile line from Brady via San Antonio and Kingsville to a point on Padre Island, 45 miles south of Kingsville, where a new deepwater harbor and seaport town would be created, in accordance with a proposition of some of the earlier railroad promoters of Southwest Texas.

The M., K. & T. road is credited with a desire to get into the Brownsville country by way of an extension from its line in Bastrop county to Gonzales, Yorktown, Beeville and Kingsville, but no authoritative announcements have been made on the subject as yet. Other reports are to the effect that the road proposes to build from San Antonio to Laredo. Through connecting lines this road has been given some idea of what the development of the Southwest country means in the way of tonnage, as last year it hauled 900 carloads of onions and 600 carloads of melons and truck from the Rio Grande country.

It is a mooted question as to whether or not the San Antonio & Rio Grande Railroad will not present the strongest application for the \$100,000 bonus. This line is built from San Juan Junction, on the Fordyce branch of the Brownsville road, to Chapin, the county-seat of Hidalgo county, a distance of 20 miles, and is definitely located and financed as far as

Falfurrias, 60 miles farther north. This portion of the line was constructed to open up a large acreage of rich territory owned by the promoters of the railroad. It is now proposed to continue the line to San Antonio in case San Antonio and other cities in the intervening territory shall cooperate. The ambitious plans of the company also include an extension from San Juan Junction to Brownsville, and even a line to Tampico.

A new candidate for the San Antonio bonus is the Concho, San Saba & Llano Valley Railroad, under contract now for a line a few miles long between Miles, in Runnels county, and Paint Rock, in Concho county. R. A. Love, vice-president, formerly of Kansas City, states that the project is purely a Texas enterprise, and that his road will be built into San Antonio in case proper encouragement is given. Speculation was indulged in for a time as to whether this project might not have Arthur E. Stilwell as backer, as it is the belief that he would like to run a branch of his Kansas City, Mexico & Orient road into San Antonio. Mr. Love declares emphatically, however, that neither Stilwell nor any other outside magnate is behind the enterprise.

Among other lines backed by private enterprise is the Artesian Belt Railroad, now under construction from Macdonna, on the Southern Pacific Railroad, west of San Antonio, for a length of 16 miles southward into Atascosa county. The grading for this length of the line has been completed and rails have been purchased for immediate delivery. Dr. C. F. Simmons of St. Louis and Texas is the principal backer of the enterprise, which was projected primarily to develop a tract of 158,000 acres of land in Atascosa county belonging to Dr. Simmons. Announcement has recently been made by Dr. Simmons that he has secured the unlimited backing of two New York trust companies, and that he proposes to extend the line to some point on the Rio Grande not yet selected, but presumed to be Brownsville, and that the line will ultimately have 300 miles of main track and 100 miles additional of branches. Dr. Simmons states that both the Southern Pacific and the International & Great Northern roads have made him propositions for the use of their terminals in running into San Antonio, and that he proposes to use one of them. It is proposed to operate the line at first with motor cars for passenger, mail and truck traffic, with steam locomotives for heavy freight, but ultimately, according to present intentions, it will be made exclusively an electric railway.

Another local enterprise that contemplates the development of a section which would be tributary to San Antonio is a road from Uvalde, on the Southern Pacific, down the Nueces Valley to Carrizo Springs, in Dimmit county. Here is a fine section of the Artesian belt, and a large acreage of choice lands would be opened up to settlement. A. T. Matlock, a leading attorney of San Antonio, is prominent in the enterprise, and it is stated that St. Louis capital has been secured for the undertaking. The project is not yet beyond the preliminary stage, but its success is apparently assured, and it is given out as the ultimate intention to extend the line to Minera, in the practically undeveloped Laredo coal fields, where a junction would be made with the Rio Grande & El Paso, a short line running out from Laredo. The length of the line would be 125 miles, and it would form a connecting link between the Southern Pacific on the north and the International & Great

Northern and the Mexican National lines at Laredo.

Opening up a territory not now supplied with railroads, the Asherton & Gulf Railroad, the private enterprise of Asher Richardson of San Antonio, is under construction between Artesia, on the International & Great Northern, to Asherton, a new town in Dimmit county, 32 miles distant from Artesia. So far Mr. Richardson has financed the road himself, and it has not as yet been bonded. The primary object of the projector of the road is the development of about 48,000 acres of fine farming, fruit and truck land. In this Artesian belt, around Carrizo Springs, there is a section of country of the finest of artesian water and the richest soil, making it what is stated to be the greatest artesian country in the United States. In the alluvial bottom lands the soil is a dark clay silt, excellent for sugar-cane, alfalfa and truck, while the red sandy soil of the hills and uplands is admirably adapted to the culture of grapes, peaches and a wide variety of other fruits. Artesian water is found at a depth of 600 to 900 feet, and the wells are easily and inexpensively bored. Experts report that this ought to become a great citrus-fruit country. It is proposed to ultimately extend the Asherton & Gulf road to Eagle Pass, on the northwest, penetrating a rich agricultural country all the way, and from Artesia to the southeast, with Aransas Pass as the goal.

Col. Uriah Lott, who has been the pioneer in railroad construction in the Southwest for a quarter of a century, having built the San Antonio & Aransas Pass, the Texas-Mexican and the St. Louis, Brownsville & Mexico roads, has in mind a project for a road from Brownsville to San Antonio. His route would be from San Antonio to Kingsville to the east of the present Brownsville road, and from Kingsville in a direct line to San Antonio. Other projects for a connecting road between San Antonio and the Rio Grande include a line from San Antonio by way of Oakville and Kingsville, and from thence to the new and very thriving town of Mercedes, coming thus into Brownsville from the west.

Numerous short lines are in various stages of promotion, among them a talked-of cut-off from Raymondville to Mission, a distance of 35 miles. A number of railroad officials, including Winchell and Yoakum, are interested in lands in the vicinity of Raymondville, where a development has been made through irrigation by artesian water.

Another projected line, which has not yet passed beyond the stage of discussion, however, is a road from Corpus Christi via Kingsville and the growing city of Falfurrias to Rio Grande City. This road, by crossing the Rio Grande and connecting with the Mexican National, would give a short line from Corpus Christi to Monterey of only 246 miles, and is considered a possibility of the future.

The Business Men's Club of Junction, county is now without a railroad, has begun an agitation for a railroad to connect that territory with San Antonio, and has discussed with the Business Men's Club of San Antonio the possibility of inducing the San Antonio & Aransas Pass Railroad to extend its Kerrville branch to San Angelo via Jackson. It is the hope of the Junction people that a line may ultimately be built that will extend to Amarillo, in the rapidly developing Panhandle of Texas.

As showing the extent of the railroad activity in this immediate section, the situation as to the Port O'Connor, Rio Grande & Northern road is of much interest. This is a \$10,000,000 corporation, of which Mike Goggan of San Antonio is president and projector, and W. I. Allen, now of Vic-

toria, formerly occupying a similar position with the Rock Island, is general manager. With a proposed line of 234 miles, the road is to be built between San Antonio and Port O'Connor, on the Gulf, in Calhoun county. The route will be via Seguin, Gonzales, Yoakum, Victoria and Seadrift, with a spur from Gonzales to Smithville, where a connection will be made with the M., K. & T. The new road will thus cross or connect with all the roads in the territory penetrated. At Port O'Connor, which is reported to be susceptible of development as a deep-water port for ocean-going vessels, there will be a seaside resort established, with a modern hotel, and other towns will be built up along the line. This is in part a revival of a project of 10 years or so ago, when the Guadalupe road was undertaken and 91 miles of roadbed graded between Victoria and the Gulf. This roadbed is said to be in almost perfect condition, so that tracklaying may be commenced almost without any repairs. It will be utilized by the present company. Work is scheduled to begin May 1 on the section from Victoria south. Arrangements have been made by which a Holland syndicate will finance the road. The first installment of \$330,000 has been paid over, and after its expenditure the Dutch syndicate will take the bonds of the company as fast as funds are needed for continuing the work. It is proposed to have the road completed into San Antonio within two or three years. There are intimations that perhaps the M., K. & T. may acquire the road in time.

One of the lines reported to be headed for San Antonio from the north is the Wichita Falls & Southern, a road projected and owned in its initial stages by J. A. Kemp, an enterprising banker of Wichita Falls. The first section of the road was built between Wichita Falls and Henrietta, 20 miles, and leased to the M., K. & T. The line has since been extended south from Wichita Falls for 60 miles and north 40 miles into Oklahoma, and there is a report that the ultimate destination of the southern extension is San Antonio by way of Llano, at which place there is renewed activity in the development of iron-ore and lignite properties.

Considerable interest attaches to the plans of the Stephenville, North & South Texas Railroad, at present in operation between Stephenville and Hamilton. A half-interest in the road has recently been sold by President B. C. Cage of Stephenville to interests represented by the Commonwealth Trust Co. of St. Louis, and there is an opinion extant that possibly Yoakum-Hawley interests may be identified with the enterprise. It is reported that the line will be extended north from Stephenville to Thurber, where there are coal mines in operation, and the proposed extension south from Hamilton is regarded as a move toward a new north and south line into San Antonio. By extending the line to San Antonio almost an air line between this city and Fort Worth would be secured for the Frisco.

Full of vast possibilities are the plans discussed as to the intentions of the big railroad operators in reference to Texas extensions, particularly the Yoakum-Hill-Trumbull interests. The Wichita Valley road, built by Morgan Jones and running from Wichita Falls to Stamford, is owned by the Colorado & Southern, recently acquired by the Hill interests. The Abilene & Northern, in operation between Stamford and Abilene, and the Abilene Southern, chartered to build south from Abilene, are all Colorado Southern enterprises. The Abilene & Southern is under construction between Abilene and Ballinger. According to the charter, the road will run to Sonora, and the charter also calls for a continuation from some point on the line

to San Angelo. It is the belief that this line will be extended to San Antonio, and possibly to Aransas Pass.

It is reported that the Rock Island has ordered construction on the Stamford & Northwestern from Graham to Stamford, and further plans for the extension of this road include a line from Stamford to Plainview and Texico.

The Quanah, Acme & Pacific road, of which Sam Lazarus is president, and of which 12 miles are now in operation, has recently amended its charter to permit of an extension into Cottle county, where it might tap the Stamford & Northwestern and give the Frisco a new connecting link with its Oklahoma line now terminating at Quanah.

The Rock Island is already at work on a 111-mile line between Amarillo, Texas, and Tucumcari, N. M., which will connect its Choctaw line with its Liberal-El Paso line. This will give the Rock Island-Frisco system the short line from St. Louis to El Paso, the South Pacific coast and Old Mexico, as well as provide it with a short competitive route between Memphis and the West and Southwest.

The Kansas City, Mexico & Orient Railroad, in operation between Wichita, Kans., and Sweetwater, Texas, is under construction between Sweetwater and San Angelo. While the main line is located southwesterly from San Angelo to the Rio Grande, a branch is to run from San Angelo southward, the published maps indicating that Spofford is to be the terminus of this branch. It is the hope of San Antonians that a branch may be extended to this city.

Col. J. H. Ransom of San Angelo is endeavoring to secure co-operation for a road to connect with the Orient at San Angelo and extend to a connection with the H. & T. C. at Llano, and taking in Eden and Brady en route.

A road whose ultimate destination is not yet decided is the Roscoe, Snyder & Northwestern, now under construction from Roscoe, on the Texas & Pacific, northwest through Nolan and Scurry counties.

A line is being built between Hereford and Stanton.

Work has been commenced on a short line between Fort Chadbourne and Robert Lee, in Coke county.

The Oklahoma, Vernon & Pacific is a company lately organized to build from Vernon into the Panhandle of Texas.

B. R. Coon, president of the Eastland, Rising Star & Southern Railroad, in which he owns 95 per cent. of the stock, has announced his intention of beginning construction work soon. The length of the projected line is 92 miles.

Delhart is headquarters for a Texas-New Mexico proposition called the Mountain Valley & Plains Railroad, which is said to be definitely assured, but detailed information about which has not been given out.

In El Paso, where a continuous development has occurred, and which is being augmented by Government irrigation projects, a railroad company has been organized under the name of the El Paso-Carlsbad Townsite & Development Co. This road is to run northeasterly to the Pecos Valley, a distance of about 200 miles, with a proposed further extension.

In addition to these projects, a number of interurban electric lines are in contemplation, both here and elsewhere throughout Texas, among them a road from San Antonio to Austin by way of San Marcos and New Braunfels.

While the list of enterprises herewith given does not include all the "paper" railroads which have been proposed, and is possibly incomplete as to those which have substance and a probability of being built,

it is sufficient to indicate the remarkable activity that prevails. I have had no opportunity to completely verify the reports and rumors by going in each instance to first hands, and give this summary on the basis only of such information and belief as is at hand. With the extraordinary activity in irrigation enterprises throughout this whole Southwestern region, however, resulting in a settlement more rapid than any other part of the country has seen in recent years, it is evident that a great increase in transportation facilities will be required to handle the traffic being created, and it would seem to be only a question of time when all the projects here named will be carried out, as well as others hereafter to be formed.

ALBERT PHENIS.

### BATON ROUGE'S REFINERY.

#### Wide Scope of the Standard Oil's Plans in Louisiana.

[Special Cor. Manufacturers' Record.]

New Orleans, La., April 16.

In connection with the construction by the Standard Oil Co. of a \$2,000,000 refinery at Baton Rouge, and the plans of the company to expend in refinery pipe lines and other developments all of the \$5,000,000 at which the recently organized Standard Oil Co. of Louisiana is capitalized, it is worthy of note that between 1000 and 1200 laborers are to be employed in constructing the refinery at Baton Rouge, which it will take eight or nine months to build, and that most of the other \$3,000,000 to be spent in the pipe lines from the Caddo fields and elsewhere will represent labor bills all along the line from the ore mines to the final placing of the pipe line and the delivery of the oil to the refinery. Furthermore, the refinery when completed will give employment to 500 or 700 men regularly.

Leading up to the present developments there have been numerous preliminary steps taken. A tract of over 200 acres on the river front, with 45 feet of water at the wharves to be constructed, and with accessibility to all the present and prospective railroads entering Baton Rouge, was secured some months ago for the site of the refinery. Details of the refinery construction had already been completed, so that work on the enterprise was begun as soon as the charter had been filed. There will be no delay in carrying the work to completion, and it is expected that the refinery will be ready for operation by January 1, 1910.

Only the general plans of the company have been announced, but it is the consensus of public opinion that the company will not only refine here the oils of Caddo parish and of Jennings and Anse la Butte as well, but that a pipe line will be constructed between the refinery and the oil field of Oklahoma besides. It is the expectation that this will become the greatest oil refinery in the country, and that there will be concentrated here the bulk of the Standard's business in the mid-Continent field. Officials of the company have stated that the magnitude of operations at the Baton Rouge plant would depend on developments, but the fact that the Standard is spending \$5,000,000 to begin with on a new pipe line and refinery indicates conclusively that the company has strong faith in the permanency and extent of the Caddo oil fields.

According to the charter provisions, the Standard Oil Co. of Louisiana is authorized to prospect and bore for, mine, market and sell petroleum and gas; purchase, transport, sell, produce, refine and export petroleum and its products; lease, construct, maintain and operate pipe lines with pumping stations and storage tanks, etc., for the handling of petroleum and gas; erect, maintain and operate such tele-

graph and telephone lines, own and operate its ships, tugs, barges and other vessels for the transportation of its products as the business of the concern may require; also to lease, own and operate wharves, docks and tank cars and all manner of things necessary for the handling of its products by land and water. It can be seen that in exercising these privileges there is an opportunity for a vastly greater expenditure than is provided for in the present capitalization.

The people of Louisiana are not unmindful of the great advertisement of the State's resources this move of the Standard constitutes. Presumably the refinery will serve the fields of Oklahoma as well as those of Louisiana, but it is stated as a fact that the great field of oil in Caddo parish, Louisiana, was the main incentive in the location of the refinery at Baton Rouge.

The capital city of Baton Rouge is much elated over the location of the big plant there. A great deal of activity is on foot at Baton Rouge, and noteworthy developments along industrial and commercial lines are in prospect.

While the domicile of the Standard Oil Co. of Louisiana will be at Baton Rouge, much of the marketing of the refinery will be done at New Orleans, so that the importance of the office here will be greatly increased. Heretofore this has been a special agency under the Standard Oil Co. of Kentucky.

Mr. Fred W. Waller of New York, president of the Louisiana company, has built more refineries than any other man in the country. He will spend much of his time at Baton Rouge, and will superintend the refinery construction. The contracts for the work will be let at Baton Rouge.

ALBERT PHENIS.

### The South Baltimore Car Plant.

The creditors' committee of the South Baltimore Steel Car & Foundry Co., Baltimore, Md., has announced that the reorganization plan made public in January has become effective. This plan provides the issuance of new stock for \$1,500,000, of which \$1,250,000 is apportioned to the creditors for their claims. Voting trustees will control the new stock for two years. The creditors' committee has issued the following letter:

"The committee, in pursuance of the powers conferred by article 3 of the creditors' agreement, has decided that a sufficient number of the creditors of the South Baltimore Steel Car & Foundry Co. have signed. It has, therefore, declared said agreement operative. In pursuance of the powers conferred upon it the committee declares that until May 15, 1909, all creditors of the South Baltimore Steel Car & Foundry Co. who have not already signed the agreement shall have the right to join in the plan of reorganization by signing a duplicate of the agreement and causing it to be delivered to the committee. After the close of business hours on that day the plan of reorganization shall be declared closed, and no further signature will be received without the special vote or authority of the committee."

### To Locate in the South.

The MANUFACTURERS' RECORD is advised that the Ohio Steel Wheelbarrow Co. of Toledo, Ohio, contemplates building a manufacturing plant in the South, and is considering Baltimore as the location. This company is conducting an established enterprise, and its plans involve arrangements for developing an export trade, therefore its new location must be advantageously situated for rail and water shipments.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### GULF, TEXAS & WESTERN.

#### Another Contract Let for Twenty Miles—Equipment Being Received.

Construction is actively under way on the line of the Gulf, Texas & Western Railway, as is shown in a letter from Mr. Ben B. Cain, vice-president and general manager, with office in the Praetorian Building, Dallas, Texas. He writes:

"Contract was let to D. J. Grigsby of Dallas, Texas, for the construction of 20 miles of our road, extending from Jacksboro, Texas, northwestward, on February 1 of this year, and work was begun on the 9th of that month. The first 20 miles is unusually heavy for that section of the State. About 70 per cent. of the grading has been completed; about three miles of track is now laid, and the work progressing rapidly along the line. We have purchased 50 miles of steel, about one-fourth of which has been delivered and the remainder is being forwarded from New York. We have two engines and 21 cars already delivered, and 10 additional cars on the way. We have received bids for the construction of the second 20 miles, and have just awarded contract also to D. J. Grigsby.

"Our road is chartered from Burr's Ferry, on the Sabine River, in Newton county, northwestward through the counties of Newton, Sabine, Shelby, Panola, Rusk, Smith, Van Zandt, Kaufman, Dallas, Tarrant, Denton, Wise, Jack, Young, Archer, Baylor and Knox to Benjamin, in Knox county.

"The company has entered into contracts requiring construction to be completed from Seymour to Fort Worth or Dallas within the next three years, but it is quite probable that a much greater portion of the line will have been finished by that time.

"A glance at the map will show that the line lies for about 100 miles through the splendid pine forests of Eastern Texas; thence northwestward through the iron-ore fields, fruit and vegetable lands of Rusk, Smith and Van Zandt counties; thence into the black lands and the commercial centers of Fort Worth and Dallas until it reaches Jack county. From there it passes into the stone and coal fields of Jack and Young counties to a point 10 miles southeastward from Olney; thence to its western terminus through what is now considered the best cotton and grain section of the State.

"While the line, as chartered, has its western terminus at Benjamin, it is the intention of the owners to extend to a connection with the Santa Fe at Lubbock, in Lubbock county, or Plainview, in Hale county, and to extend from the eastern terminus to a Gulf outlet at or near New Orleans.

"The chief engineer in charge of construction is John T. Witt, Jacksboro, Texas, and the contractor, Mr. Grigsby, as noted, resides at Dallas. J. J. Jermyn of Scranton, Pa., is president; Ben B. Cain of Tyler, Texas, vice-president and general manager; Roy C. Megargel of New York, vice-president, and W. Frank Knox of Tyler, Texas, secretary and treasurer."

### Hattiesburg Traction Contract.

The MANUFACTURERS' RECORD is informed that A. M. Hewes, contractor, Monadnock Building, Chicago, has been given the contract to erect and equip a new power station building for the Hattiesburg Traction Co. at Hattiesburg, Miss. The equipment will include one 500-kilowatt direct-connected generating unit, one 325-



kilowatt direct-connected generating unit, one 150-kilowatt motor generator set, and three 250-horse-power water-tube boilers. The new power station building will be of brick and concrete. The company will have four cars, with necessary electrical equipment, about six miles of overhead electrical construction, 14 railroad crossings and about half a mile of new track. All of this will be furnished by the contractor.

There will be about six miles of track operated by the company, all of which is laid excepting the one-half mile here mentioned. The plant will be thoroughly up to date and economical in operation. The engineer in charge for the contractor is R. A. Pratt. No architect is required. The plant is a steam installation, as indicated by the equipment, and there is no water-power to be developed in that vicinity. The contractor has already purchased most of the machinery, and expects to let building contract for the power station within about four weeks. The work will be finished about August 15.

#### United Railways of Baltimore.

The annual report of the United Railways & Electric Co. of Baltimore covering the year 1908 shows gross earnings \$6,834,802, a decrease of \$183,279 as compared with 1907. The net earnings, after payment of operating expenses, including insurance, were \$3,541,464, a decrease of \$6530, a considerable saving having been effected in the cost of operating. While the fixed charges, including all taxes, interest on car trusts, etc., increased \$149,240, there was a reduction of more than \$215,000 made in the amount of surplus credited to extraordinary expenditures, with the result that the balance carried to the credit of profit and loss was \$93,771, an increase of more than \$56,000 as compared with 1907. The extraordinary expenditures include the sums required for rehabilitating the property, which work is different from ordinary maintenance and repairs. The rehabilitation thus far includes the building of five car barns and terminal stations of concrete, and two new buildings are in immediate contemplation. The company has also purchased 530 cars, making its equipment ample for present needs. It has furthermore more than doubled the capacity of its power stations, their capacity being now 35,405 kilowatts, and six new stations have been built with a capacity of 28,000 kilowatts. Six small power stations were abandoned.

#### New Equipment, Etc.

The Missouri Pacific Railway is reported in the market for 7000 tons of bridge steel.

The Chicago, Rock Island & Pacific Railway is reported to have received prices on 250 tons of structural steel.

The Tidewater Power Co. of Wilmington, N. C., is reported to have bought four single-truck semi-convertible cars and three double-truck open cars from the J. G. Brill Company.

The Southern Railway is reported to have ordered 300 tons of structural steel from the McClintick-Marshall Construction Co.

The Norfolk & Western Railway, it is reported, will purchase 300 freight cars.

The Galveston Electric Co. is reported to have purchased 10 nine-bench open cars and five 12-bench open cars from the American Car Co.

The Oklahoma Midland Electric Railway of Hobart, Okla., it is reported, will buy two small gasoline motor cars.

The Augusta Railway & Electric Co. of Augusta, Ga., is reported in the market for eight single-truck cars.

The San Antonio Traction Co. is re-

ported to have purchased 10 semi-convertible cars, each 28 feet long, from the American Car Co.

The Coal & Coke Railway Co. is reported to have ordered from the Barney & Smith Car Co. two coaches and one combination car.

#### Train Ferry Equipment.

An officer of the New York, Philadelphia & Norfolk Railroad Co., which ferries trains across the Chesapeake Bay between Cape Charles and Norfolk, Va., 26 miles, has awarded contracts for a steel car float and a tugboat. The former is being built by the New York Shipbuilding Co. at Camden, N. J., while the contractor for the tug is J. A. Dialogue & Co. of the same city. The barge or car float will be 345 feet long, 48 feet 8 inches wide, 14 feet depth of hold, and will carry 30 freight cars. It will be steered by steam, and will have 17 water-tight bulkheads. The tug will be 140 feet long, 26 feet beam, 14 feet depth of hold. It will have one Scotch boiler 14 feet 6 inches in diameter and 10 feet long, with four furnaces. The boiler will carry 180 pounds of steam. The engines are triple expansion, with cylinders, respectively, of 17, 24 and 41 inches diameter by 30 inches stroke. The tug will be lighted by electric lights, will have steam steering gear, and all auxiliary machinery will be independent. She will have a big fire and wrecking pump, and will carry 125 tons of coal in her bunkers.

#### Railway and Springs Development.

Mr. Lee Guggenheim of Nashville, Tenn., informs the MANUFACTURERS' RECORD about the railway enterprise which he is pushing, thus:

"We have incorporated the Nashville & Crocker Springs Rapid Transit Railway. This line will form a connection with the Nashville Street Railway on 1st street. It will be about 12 miles long from Nashville to Crocker Springs, which has been a noted summer resort for the last hundred years, and its waters are valued for their medicinal qualities.

"The name of the Springs will be changed, and they will be called the Carlsbad of America. Mr. Guggenheim contemplates building a modern hotel, large and commodious, and up to date in every way, this being in addition to the railway. Engineers will be put in the field to make the surveys for the line, and contracts will be let within the next 30 days.

"The incorporators are as follows: Lee Guggenheim, president and general manager; W. F. Webb, vice-president; R. B. Jones, secretary; J. A. Witherspoon, Jas. B. Carr, Frank B. Marr, F. Roddy and W. W. Moorehead."

#### New Orleans Railway & Light.

The report of the New Orleans Railway & Light Co. for the year 1908 shows gross earnings \$5,968,498, a decrease of \$31,232 as compared with the year 1907. The operating expenses of all companies were \$3,364,984, an increase of \$77,271. There was added to surplus \$498,952, an increase of \$66,186. The sum of \$488,599 was expended for construction, improvements and betterments and the purchase of new property. The company sold through theibernia Bank of New Orleans \$2,400,000 of 4½ per cent. bonds to New York and Paris bankers.

#### Clinton Street Railway.

Mr. M. L. Holcombe writes from Clinton, Okla., to the MANUFACTURERS' RECORD concerning the Clinton Street Railway Co. and the Clinton Railway Construction Co., recently incorporated. He says that the railway company has been organized, by business men in Clinton to build and operate a street railway and later to ex-

tend it into the country adjoining. The construction company has been organized to do the work. The road first contemplated will be only in the city, and will consist of a very few miles. The company is formed in good faith by some of the strongest business men of Clinton, and means to build and put the line in use. They are in the market for ties and some new and second-hand rail from 25 to 35 pounds. The officers have not yet been chosen, but the directors are M. L. Holcombe, C. W. Goodwin, R. O. Hunt, E. A. Humphrey, C. H. Lamb, E. N. Tittsworth, A. N. Curry and B. M. Littell, all of Clinton, Okla., and H. Smith of Arapaho, Okla.

#### Fitzgerald & Ocilla Electric.

THE MANUFACTURERS' RECORD is officially informed that the Fitzgerald & Ocilla Electric Railway & Power Co. at its annual meeting at Fitzgerald, Ga., authorized an issue of \$250,000 of first mortgage bonds to cover its proposed line between Fitzgerald and Ocilla, Ga., and lines in those places, making a total of 12 miles. This includes an extension to the large car shops of the Atlanta, Birmingham & Atlantic Railway. The power-house will be located at Lake Beatrice, about midway between Fitzgerald and Ocilla, and a summer resort is to be developed there, with park, golf grounds and shooting preserve. Construction of the railway will begin about May 1. S. Tilden Holtzendorff is president; office, 61 Fifth avenue, New York city; D. B. Jay, vice-president; C. A. Holtzendorff, secretary and treasurer, both at Fitzgerald, Ga.; James R. Turner, legal and financial agent, 37 Wall street, New York city; Jay & Jay, local counsel, Fitzgerald, Ga.

#### Line to Develop Coal Fields.

A charter has been filed in Tennessee for a new railroad called the Tennessee, Alabama & Kentucky, which, according to Rutledge Smith of Cookeville, Tenn., who heads the list of incorporators, is to develop rich coal fields in Van Buren county. The line is to cross the Nashville, Chattanooga & St. Louis Railway at Sparta, Tenn., and the Tennessee Central Railroad at Cookeville. It will reach the Cumberland River at either Gainesboro or Celina.

Mr. Smith is further reported as saying that Eastern capitalists have become interested and a careful study will be made of the coal deposits, upon which options have been secured. If the report on these is favorable, as expected, the railroad will be built immediately. A preliminary survey will be made by R. J. Moscrip.

The other incorporators in the railroad company are R. L. Farley of Cookeville, S. B. Anderson of Celina, J. N. Cox of Gainesboro and O. K. Holladay of Cookeville, where the headquarters of the railroad will be situated.

#### Greenville & Newport Electric.

Mr. P. C. Ottinger of Knoxville writes from Greenville, Tenn., to the MANUFACTURERS' RECORD saying that he is securing rights of way for a proposed electric railway between Greenville and Newport, but a company has not yet been organized. This confirms a previous report. The line is to be built by New York capitalists.

#### Trackage Agreement and New Work.

An officer of the Mobile, Jackson & Kansas City Railway is reported as saying that arrangements have been made to handle trains of the Mississippi Central Railroad into Mobile. These trains will run from Natchez to Hattiesburg over the Mississippi Central line, and from there they will follow the Mobile, Jackson & Kansas City route to Mobile. It is said that the service will be started May 1.

Another report from Mobile says it is officially announced that a company will be organized in a few days to take over the terminals of the Mobile, Jackson & Kansas City Railroad, and that new warehouses, piers, docks and other improvements will be built there at a cost of more than \$500,000; also that a trackage agreement will be ratified for handling the Mississippi Central trains.

#### Blue Valley Line.

President M. M. Sweetman of the Blue Valley Traction Co., headquarters in the American Bank Building, Kansas City, Mo., writes the MANUFACTURERS' RECORD that the proposed railroad will run from a point near where 15th street intersects the Blue River, southward in the Blue River Valley through Leeds and Swope Park, whence it will run east to Raytown. The company's engineer, W. A. Smith, is working on the details of construction and completing the survey, but is not yet ready to receive bids for construction or material. The directors of the company are M. M. Sweetman, president; U. S. Epperson, vice-president; J. M. Lowe, treasurer; C. W. German, secretary; W. S. Dickey, C. C. Craver, Sam T. McDermott, B. B. Joffe and H. M. Dixon.

#### Building Into Shreveport.

Mr. F. H. Drake, vice-president of the Louisiana & Arkansas Railroad, writes from Minden, La., to the MANUFACTURERS' RECORD, saying that the property bought in Shreveport by Mr. William Buchanan and himself was purchased for terminal property of the railroad company. The line is being built into Shreveport, and he expects that with average weather conditions it will be completed by October next. About 11 miles of the extension are already nearly finished, the greater part having been constructed by the Minden East and West Railway Co., which is being turned over to the Louisiana & Arkansas Railroad Co. Bids on the remainder of the work were submitted on April 10, and the contract for it was awarded to M. Tansy.

#### Sweetwater to San Angelo.

An officer of the Kansas City, Mexico & Orient Railway writes the MANUFACTURERS' RECORD thus:

"This company is preparing to build an extension of its line from Sweetwater to San Angelo, Texas, where it will connect with the terminus of the Gulf, Colorado & Santa Fe Railway.

"The present operated line of this company in the United States extends from Wichita, Kan., to Sweetwater, Texas. The extension to San Angelo is 78 miles long, and involves principally the work of laying track and building bridges. The grading is already completed.

"Preparations are also being made for the erection of a fine passenger station and freight station at San Angelo, and for the building of other division terminal facilities."

#### West Point to Houston, Miss.

Mr. J. M. Hardison of West Point, Miss., writes the MANUFACTURERS' RECORD saying that a temporary organization of the West Point & Houston Railway Co. has been effected and application was made for a charter. As soon as the charter has been approved by the Governor it is intended to permanently organize and to make a survey of the proposed route from West Point to Houston, Miss., 30 miles.

#### Street Cars for Washington, N. C.

The Washington Investment Co., W. E. Jones, general manager, informs the MANUFACTURERS' RECORD that the street railway at Washington, N. C., will have four

miles of track. It will be equipped with the latest electric apparatus, and will be built for the Washington Investment Co. The plant will be of 500 horse-power, and will have three cars operating. Contract for building and complete equipment has been let, and actual construction is to begin April 20, to be completed by August 1. The franchise provides for sale of power to the city, but no lighting. F. P. Massey is engineer in charge.

#### Laurinburg & Southern.

An officer of the Laurinburg & Southern Railroad informs the MANUFACTURERS' RECORD that the route from Laurinburg, N. C., has been changed to Johns Station, on the Atlantic Coast Line, instead of to Gibson. The grading is being done now, and the road is expected to be completed to Laurinburg by July 1. A survey is being made for a projected extension to Wagram, N. C., about 12 miles. This will be through a country which is principally level and a good agricultural district highly developed for farming. Mr. Baxter Morrison is in charge of the construction work.

#### Concho, San Saba & Llano.

Mr. R. A. Love, first vice-president and general manager of the Concho, San Saba & Llano Valley Railway Co., Miles, Texas, writes the MANUFACTURERS' RECORD that the line will extend from San Angelo to San Antonio, Texas, about 225 miles. It will traverse a very fine section of country—agricultural, mineral and stock farming. The other officers are D. E. Sims, president; P. K. Wilson, chairman of the board. The general offices are at Miles, Texas. Construction will begin before May 1.

#### Railroad Notes.

The Rock Island has completed and put in use a \$20,000 station at Amarillo, Texas.

The New Orleans & Northeastern Railway, it is reported, has contracted with the Birmingham Slag Co. for 2000 cars of slag to be used for rebalasting the line between Shreveport and Meridian.

#### Emporia Hydro-Electric Corporation.

The Hydro-Electric Corporation, Emporia, Va., is progressing with the construction of its plant, for which contract was awarded to Stamper Bros. & Ragland and E. T. D. Myers of Richmond, Va., with C. P. E. Burgwyn of Richmond as engineer in charge. It is developing 2800 horse-power to transmit electricity for lighting and power at Emporia, one-half mile distant, and within two miles. Its dam is of concrete, 40 feet high and 600 feet long, the electrical generators being furnished by the Westinghouse Electric & Manufacturing Co., Pittsburg, and the water-wheels by S. Morgan Smith of York, Pa. Contracts require completion of the plant by September 1. The Ashby Cotton Mills, the Emporia Cotton Mills and the Emporia Manufacturing Co. (planing mill and box factory) have contracted for power from the development. The Emporia Hydro-Electric Corporation controls the Emporia Light & Power Co., which is reconstructing its equipment and installing a new plant to be supplied from the water-power development. The Emporia Hydro-Electric Corporation officers include W. Samuel Goodwyn, president; D. B. Wood, vice-president, and W. F. Deal, secretary-treasurer, the latter being the active manager.

It is estimated that the potato crop this year in the neighborhood of Hastings, Fla., will yield \$1,000,000.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

#### The Williams Cypress Mill.

The F. B. Williams Cypress Co. of Patterson, La., is proceeding with the construction of its new plant mentioned in January. It summarizes its plans in the following statement to the MANUFACTURERS' RECORD: "Bids are to be received on April 24 for the construction in steel of our proposed sawmill building. It is not determined positively that we will build of steel. Should this method of construction prove too expensive we will use wood. We are unable to give you the approximate cost at the present time. J. J. Monaghan of the Filer & Stowell Company (Milwaukee, Wis.) has done all of our engineering and architectural work and made the plans by which the mill will be built. The Filer & Stowell Company is furnishing the detailed drawings. The machinery and boilers have been bought, the former from the Filer & Stowell Company, Milwaukee, Wis., and the latter from the Casey-Hedges Company, Chattanooga, Tenn. J. F. Wakefield is in charge of the installation. We have already begun the construction of planing mill, and will begin laying foundations for the sawmill within the next 30 days. The mill is to have two bands, a resaw, two edgers and two trimmers, and will probably have a capacity of about 140,000 feet per day."

#### Southern Carolina Lumber Co.

The Southern Carolina Lumber Co. of Marion, S. C., which was recently incorporated with a capital stock of \$1,200,000, advises the MANUFACTURERS' RECORD that it owns 74,000 acres of timber lands within a radius of 10 miles of Marion, and is preparing for its development.

The company is erecting a plant to cost about \$100,000, which is expected to be ready for operation by June 1. It consists of a sawmill to be equipped with a band and horizontal resaw of 75,000 feet capacity per 10 hours, planing mill, box factory, veneer mill, drykiln, dry lumber sheds, logging road, etc. The structures for the planing mill and box factory are each 80x100 feet, and all necessary machinery has been purchased and is being installed. Officers of the company are C. E. Gill, Wausau, Wis., president; H. S. Wunderlich, Marion, vice-president; C. H. Leib, Chicago, secretary, and C. F. Ruggles, Milwaukee, treasurer.

#### Construction Work Progressing.

The MANUFACTURERS' RECORD is advised that construction work on the sawmill plant at Hattiesburg, Miss., of the J. J. Newman Lumber Co. Scranton, Pa., is progressing satisfactorily, and the plant is expected to be ready for operation by June 1. The mill building is of steel, equipped with two bands and a resaw, surrounded by steel docks on concrete foundations. All lumber sheds, planing mills, yard docks, etc., are also on concrete foundations. The drykilns are of brick, and covered with a reinforced concrete roof designed by Franklin M. Hill of Hattiesburg, the engineer in charge of construction. Four of the drykilns are 21 feet wide and five of them 19 feet wide, all 121 feet long. The Filer & Stowell Company of Milwaukee is erecting the plant.

#### Gulf Exporters Meet.

At the general meeting of the Gulf Coast Lumber Exporters' Association at Gulfport, Miss., last week a revised classification covering export grades of yellow-pine lumber was adopted. Papers were read and addresses made by E. P. Holmes of Gulfport, G. R. Lindsay of Lyman,

Miss.; Arthur Forchheimer of Germany, John E. Williams of New Orleans, Judge James H. Neville and W. A. King of Gulfport, and J. F. Wilder of Epps, Miss. The following officers were in attendance: Robert Hunter, Mobile, president; Gus Eitzen, Pensacola, vice-president at large; E. P. Holmes, Gulfport, treasurer, and J. O. Elmer, Mobile, secretary. The next meeting of the association will be held at New Orleans, subject to the call of the president.

#### Begins Construction of New Mill.

The Gulf Lumber Co. of St. Louis, already operating a lumber plant at Fullerton, La., is reported to have awarded a contract to the McDonough Manufacturing Co. of Eau Claire, Wis., for the erection of its proposed new plant which it will establish at Fullerton. The new mill, it is said, will be of concrete and steel construction, 64x212 feet, and will be equipped for a capacity of 400,000 feet of lumber per day. Construction work is expected to begin within 30 days, and the plant to be completed within six months. Mr. M. L. Fleishel is the vice-president and general manager of the company.

#### Big Mill for Mississippi.

The Bay Lumber Co. of New Orleans has purchased 12,000 acres of timber land in Jefferson county, Mississippi, at about \$165,000. This company will build a plant to develop the property, and telegraphs the MANUFACTURERS' RECORD that the construction of the mill was begun on April 19. The mill will have a daily capacity of 100,000 feet of lumber, and will cost \$125,000. Its machinery has been arranged for, and will be ready for operation in about four months.

#### Sawmill at Dermott, Ark.

The Leavitt Land & Lumber Co. of Dermott, Ark., will erect a single-band hardwood lumber mill at Dermott, to be equipped for a capacity of 40,000 feet of lumber per day. The plant will cost approximately \$100,000, but as yet the architect and engineer have not been selected nor the date of opening proposals for machinery determined. Officers of the company include J. G. Leavitt, president; William H. Morris, vice-president, and H. B. Leavitt, treasurer.

#### Meeting of Texas Lumbermen.

The twenty-third annual convention of the Lumbermen's Association of Texas was held at Galveston last week, at which the following officers were elected for the ensuing year: J. E. Whiteselle, Corsicana, president; W. H. O'Neill, Dallas, vice-president, and S. T. Swinford, Houston, secretary and treasurer. San Antonio was selected as the place for meeting in 1910.

#### The Davidson Lumber Co.

The Davidson Lumber Co. of Camden, S. C., has about completed its new plant, and will soon begin to manufacture long and short-leaf yellow-pine lumber, flooring, ceiling, turned columns, etc. This company succeeds the Stevens Lumber Co. of Kershaw, S. C.

#### Lumber Notes.

The monthly meeting of the Alabama-West Florida Lumbermen's Association was held at Montgomery last week.

At a meeting of the National Hickory Association at Cincinnati last week the following officers were elected: President, John W. Herron, Jr., Cincinnati; vice-president, Joseph Ashcroft, Poplar Bluff, Mo.; secretary, H. D. Hartley, Detroit, Mich.; treasurer, W. A. Snyder, Piqua, O.

## MINING

### Peat as Fuel.

Peat is partly decomposed vegetable matter that has formed either where the ground is saturated with water most of the time or where it is permanently covered with water. It is the dark-colored or nearly black soil found in bogs and swamps, commonly known as muck, although technically a distinction is made between peat and muck, the latter name being restricted to those forms of swamp deposits that contain too much mineral matter to burn freely. Dry peat may be very fibrous and light-colored or compact and structureless and dark brown or black. It is usually somewhat lighter in color when dry than when freshly dug. When wet it contains, as a rule, from 80 to 90 per cent. or more of water; that is, a short ton of wet peat rarely contains more than 300 pounds of dry peat, and may yield as little as 100 pounds. In the wet condition it is entirely non-combustible, and the various processes by which it is prepared for use or market consist principally of methods for ridding it of water quickly and cheaply and for increasing its fuel efficiency and transportability.

The great peat deposits that are widely scattered in the northern part of the United States have at various times aroused strong public interest. In the winter of 1902-1903, for instance, when the strike of the coal miners in the anthracite region of Pennsylvania brought the country to realize that it was to a large extent dependent on these miners and their employers for an important part of its fuel supply, a number of writers familiar with the conditions in the countries of Northern Europe called attention to the fact that those countries, possessing a climate much more severe than ours, were using great quantities of peat for fuel, while in this country, although the material was abundant, it had only exceptionally been prepared for use, and then in the crudest way. During the next few months many experimental and speculative plants were established to convert peat into fuel, but unfortunately many of these attempts were financially unsuccessful, and as the strike was soon over and coal could again be had at reasonable prices and very little peat fuel was put on the market at any price, interest in peat waned and at the present time the public is almost indifferent to it. In the few places where it can be purchased, however, it finds a ready sale and is thoroughly satisfactory for all domestic uses.

An interesting account of the nature, origin and uses of peat appears in a report by E. S. Bastin and C. A. Davis on the peat deposits of Maine, which has just been published by the United States Geological Survey as Bulletin 276. Copies of this bulletin may be obtained free of charge by applying to the director of the survey at Washington, D. C.

### Caddo Petroleum.

Various crude petroleum from the new Caddo oil field, in Northwestern Louisiana, have recently been examined by the United States Geological Survey. The samples were collected by Prof. G. D. Harris, State geologist, and his assistant, Prof. I. Perrine.

The samples, 10 in number, ranged in specific gravity from 0.819 to 0.925, or from 21.3 degrees to 41.0 degrees Baume. They were all black except one sample of heavy oil, which held water and clay in suspension and was therefore brown. In odor they resemble the Oklahoma oils, giving no indication of sulphur. Most of the samples began to boil at temperatures above 200 degrees C., and only two samples contained gasoline—one 3 per cent.,



the other 1½ per cent. The burning-oil content ranged from 12 to 55 per cent. The specific gravity of the burning-oil fractions varies from 0.77, which is unusually light, to 0.87, which is unusually heavy. The paraffin nature of the hydrocarbons of some of these oils is indicated by their low specific gravity and also by their low content of asphalt, which does not exceed 1 per cent., and in most of the samples is less than one-half of 1 per cent. The nature of the paraffin wax is not yet determined.

#### Fire Creek Collieries Co.

Advices relative to the plans of the Fire Creek Collieries Co., which was recently incorporated with a capital stock of \$150,000, have been received by the MANUFACTURERS' RECORD. The company has acquired 3500 acres of coal lands near Pembroke, W. Va., and will increase the capacity of its mine from 600 to 1000 tons of coal per day. It is intended to install a new power plant, tippie and plane, construction work to be started immediately. Officers and directors of the company include P. M. Sharples, president; Isabel Darlington, secretary and treasurer; Thos. S. Butler and T. L. Eyre. The company's main offices are at West Chester, Pa., and correspondence may be addressed to Miss Isabel Darlington, Farmers and Mechanics' Trust Building.

#### Tennessee's Coal Operations.

Statistics collected by Robert A. Shiflett, chief of the Tennessee State Bureau of Mines, which will be embodied in his annual report to be submitted to the Governor in June, shows that the total coal production in Tennessee during 1908 was 6,082,851 tons, valued at \$6,961,393, which is a decrease of about 12 per cent. as compared with the production for 1907. The value of improvements made at the mines during the year amounted to \$150,493, while the total amount paid for labor was \$4,508,075.

#### Buys Coal and Timber Lands.

A dispatch from Hinton, W. Va., states that James T. McCreery of that city and associates have secured options on approximately 16,000 acres of coal and timber lands in McDowell county, West Virginia; Pike county, Kentucky, and Buchanan county, Virginia.

#### To Develop Silicon.

S. E. Horine of Burkittsville, Md., is planning the development of silicon deposits which are said to be of unusually high quality.

#### Mining Notes.

The West Virginia Coal Mining Institute will hold its annual convention at Elkins on June 1 and 2.

The Bewley-Darst Coal Co. of Blountville, Tenn., has incorporated with a capital stock of \$125,000. Its incorporators include Jake Bewley, Guy Darst, N. D. Buchanan, Jr., John R. Baumgartner and B. B. Burns.

#### Wants a Furniture Factory.

A furniture factory is wanted at Marietta, S. C., in the heart of a hardwood section. Information regarding the advantages can be obtained by addressing R. Mays Cleveland of Marietta.

"Bristol, Virginia-Tennessee: Its Industrial Resources and Advantages," is the title of an attractive booklet issued by the freight traffic department of the Southern Railway as a means of attracting capital to safe and legitimate lines of industrial and commercial endeavor.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

#### The Eureka Cotton Mills.

The Eureka Cotton Mills of Chester, S. C., will install 10,000 spindles and 450 looms in the addition reported last week. This equipment will be driven by electricity, producing coarse yarns and fine sheetings. O. A. Robbins of Charlotte, N. C., is the engineer in charge, and contracts for the new machinery have been awarded as follows: Spinning, Fales & Jenks Machine Co., Pawtucket, R. I.; carding, Saco & Pettie Machine Shops, Newton Upper Falls, Mass.; roving, Providence Machine Co., Providence, R. I.; looms, Draper Company, Hopedale, Mass.

#### The Perkins Hosiery Mills.

The Perkins Hosiery Mills of Columbus, Ga., lately noted as to enlarge, has awarded contract to John H. Lowe, Atlanta, Ga., for the erection of a two-story 84x210-foot building. In this structure the company will install 5000 to 8000 spindles, 24 cards and accompanying textile equipment, to be operated by 350 to 400 electrical horse-power. The daily output will be 5000 to 7000 pounds of white and colored yards for the knitting trade. About 100 operatives will be employed. The company now operates 5000 spindles, 275 knitting machines, etc., and employs 300 operatives.

#### The James Knitting Mill.

C. F. and A. N. James of Mt. Pleasant, N. C., will establish the James Knitting Mill. They have purchased materials for building, and will buy 25 knitting machines and steam-power equipment. The plant will have a daily output of 125 to 150 dozen pairs of hosiery in the gray, employing 15 to 20 operatives. A. N. James has recently been elected secretary-treasurer of the W. R. Kindley Cotton Mill at Mt. Pleasant.

#### The Greenwood Cotton Mill.

The Greenwood Cotton Mill of Greenwood, S. C., has awarded contracts for and is now installing 9000 spindles in its No. 1 plant, increasing it to 16,000 spindles. This company has 14,000 spindles in its No. 2 mill, and the addition will increase its total equipment to 30,000 spindles, with 672 wide looms, manufacturing wide print cloth. J. E. Sirrine of Greenville, S. C., is the engineer in charge of the installation.

#### The Priscilla Mills.

The Priscilla Mills of Meridian, Miss., has been incorporated with a capital stock of \$30,000 by A. W. McLellan, Wm. H. McLellan and Charles McLellan of New Orleans, La. This company will operate, the Meridian branch plant (detailed last week) of the Alden Knitting Mills of New Orleans. Contracts have been awarded for buildings, 100 knitting machines, electrical power equipment, etc.

#### Woodside Co. Increasing Capital.

The Woodside Cotton Mills of Greenville, S. C., will hold a meeting of stockholders on May 11 to vote upon the recent resolution of the directors, recommending that the company's capital stock be increased from \$600,000 to \$800,000. This

action is in connection with the company's plan to build a 25,000-spindle addition, of which particulars were reported by the MANUFACTURERS' RECORD last month.

#### The Marion Manufacturing Co.

The Marion Manufacturing Co. of Marion, N. C., is understood to be planning the construction of a mill to be equipped with 12,500 ring spindles, 300 looms, etc., for manufacturing brown sheetings. This company is capitalized at \$250,000, and was incorporated recently. Its president and treasurer will be D. D. Little of Spartanburg, S. C.

#### Want a Knitting Mill.

The people of Oxford desire to have a knitting mill located in their city. Information as to the advantages for manufacturing knit goods there can be obtained by addressing the Granville Real Estate & Trust Co., Oxford, N. C.

#### Increasing Its Capital Stock.

The Dudley Shoals Cotton Mill Co. of Granite Falls, N. C., has increased its capital stock from \$100,000 to \$200,000. This company is now operating 5000 ring spindles on the production of cotton yarns.

#### Wants Knitting Machinery Data.

J. H. Tate of High Point, N. C., is interested in a plan to establish a hosiery mill, and wants data and prices on the necessary machinery.

#### Textile Notes.

It is reported the Ball Ground (Ga.) Cotton Mills propose to build a plant at Jacksonville, Fla.

J. C. Moody of Brunswick, Ga., will establish a hosiery knitting mill at Macon, Ga. The capitalization will be \$14,000.

Emanuel Geril of New York has, it is reported, purchased the Buena Vista (Va.) Woolen Mills, and will convert into a silk mill.

The Board of Trade, Americus, Ga., is promoting a movement for the organization of a company to build a 20,000-spindle cotton-yarn mill.

The Wilson & Dawson Hosiery Co. of Tarboro, N. C., contemplates adding 25 knitting machines and building and equipping a dye plant.

Z. T. McKinney and R. L. Walker of Greenville, S. C., and W. H. Patterson, Candler Building, Atlanta, Ga., are reported as forming a company to build a cotton mill at Marietta, S. C.

The Tombigbee Cotton Mills, the Columbus Underwear Mills and the Columbus Comfort Factory of Columbus, Miss., will, it is reported, combine and build an electric plant to drive the three mills.

The Walker County Hosiery Mills, Lafayette, Ga., awarded contract to Mayo Knitting Machine & Needle Co., Franklin, N. H., for installation of 85 knitting machines in connection with enlargement reported last week.

The Factory Club, Fort Worth, Texas, has correspondence from F. Wiedmann of Marine View, Hove, Sussex, England, relative to the organization of a company to establish in Fort Worth a plant for manufacturing artificial silk and horse hair from cotton waste.

#### Wants Narrow Webbing.

The Fayette Manufacturing Co., 412 Security Trust Building, Lexington, Ky., invites correspondence from manufacturers of and dealers in narrow webbing.

The Georgia Retail Hardware Association will hold its annual convention at Valdosta May 18-20.

## FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

#### Oxide of Zinc and Rubber.

Hugo Michaelsen, 26-28 Amaliegade, Copenhagen, Denmark, writes the MANUFACTURERS' RECORD:

"I represent the United Metals Selling Co. of New York for the sale of copper in this territory, and furthermore I do a rather important business in American oxide of zinc from the New Jersey Zinc Co. If there is any other producer of oxide of zinc who would be willing to dispose of surplus stock at reduced prices I would be very pleased to enter into direct business with such a firm, but it is a condition that the quality should at least equal to the New Jersey Zinc Co.'s product. I am not interested in machines, but in all sorts of raw materials used by manufacturers. Besides the named lines, I do a rather large business with the rubber manufacturers, to whom I sell crude India rubber and all other sorts of ingredients used in this industry."

#### Rubber, Silk, Thread, Etc.

M. S. Kiselstein, No. 36 Franciskanska street, Warsaw, Russia, writes the MANUFACTURERS' RECORD:

"I should like to import the following from America: Fancy silk, raw rubber, thread, sewing thread and spools, and I would appreciate it if you would kindly give me some information as to original source of supply of these goods. I represent the 'Zeisschrift der Confectionan' Manufacturers' Journal of Berlin since 1894, and I shall be glad to give you any particulars you may need in regard to importation into this country."

#### Wanted for Cuban Trade.

M. Cruz & Co., Amistad 136, Havana, Cuba, write the MANUFACTURERS' RECORD:

"We take the liberty of addressing you to ask if you know some house of articles for gentlemen, and if you know them we will thank you very much if you will tell them to send us their catalogues. We have great wishes of knowing also the manufacturers of looking-glasses like as a 'rayo X.'"

#### Chicago Southern Club.

The rooms of the recently organized Southern Club of Chicago at 116-118 Dearborn street will be opened May 1. This club is the outgrowth of an opinion held by a number of Southern men residing in Chicago and vicinity that there is room in the club life of Chicago for a "club home" for Southerners and men of Southern affiliations, a place where Southerners, whether residents or temporarily in the city, may meet socially. To membership are eligible men of Southern birth, or who have even one parent or grandparent of Southern birth, or who have lived five years in the South, or who are, in the opinion of the membership committee, of Southern affiliations. Commissioned officers on the active list of the Army, Navy, Revenue Cutter Service and the Public Health and Marine Hospital Service are eligible for non-resident membership if otherwise eligible. The officers are Messrs. John Glass, president; P. W. Thompson, vice-president; William P. Dawson, secretary; W. N. Jurnagin, treasurer; J. T. Harahan, C. F. Gunther, John C. Shaffer, W. E. Paulson and H. H. Bell, board of governors.

## MECHANICAL

### Giant Mallet Type Locomotive.

The Baldwin Locomotive Works of Philadelphia, Pa., has completed for the Southern Pacific Company two locomotives, said to be the heaviest so far built. These engines belong to the Mallet articulated type, first introduced on European railways in 1888 by Anatole Mallet, a noted French engineer. The locomotive is called "articulated" because the frame is jointed at mid-length, and the forward wheels thus constitute a truck, which swings about the fulcrum pin when the engine is rounding a curve. Thus, although the total wheel base is long, the rigid wheel base is comparatively short, and engines of great length and high power can successfully traverse sharp curves. Each group of driving wheels is operated by a separate pair of cylinders, and these are arranged on the compound system, the steam first entering the rear or high-pressure cylinders and then passing through a flexible pipe connection to the front or low-pressure cylinders. A second flexible pipe conveys the exhaust steam from the low-pressure cylinders to the smoke-box, from which it is discharged up the stack in the usual manner.

One of these engines is illustrated herewith.

The Mallet type was first introduced on American railways in 1904, and has fully proved its value for heavy service on lines having steep grades and sharp curves. The new Southern Pacific locomotives are carried on 20 wheels, four pairs of driving wheels in each group, with a two-wheeled truck front and back. The engines exert a tractive force of nearly 95,000 pounds, which will be utilized in working heavy

pressure of 200 pounds per square inch. A superheater, for drying the steam before it enters the low-pressure cylinders, is placed in the smoke-box, and the boiler is provided with a separate chamber, in which the feed water is heated to a high temperature.

An interesting feature of this design is that it is separable. The boiler is built in two parts, which are bolted together, and by removing the bolts, taking out the frame fulcrum pin and disconnecting the

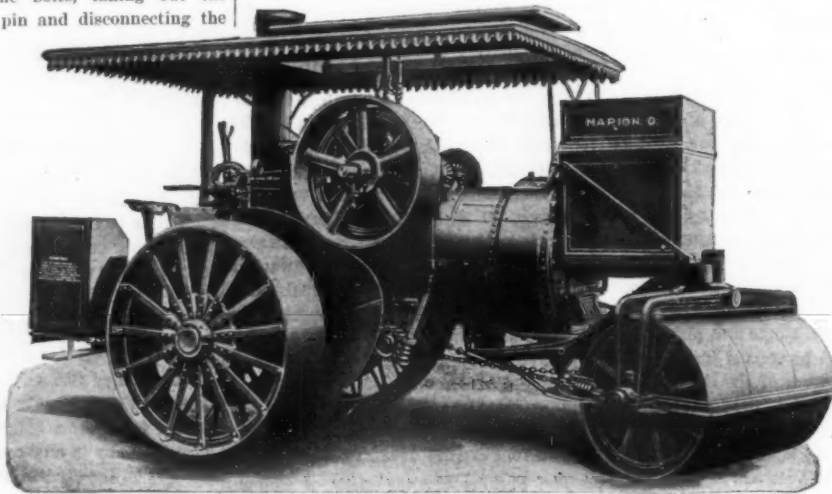
wheels, estimated, 390,000 pounds, weight total engine, estimated, 430,000 pounds; weight total engine and tender, estimated, 600,000 pounds; tank capacity, water, 9000 gallons; tank capacity, oil, 2850 gallons.

### Huber Roller and Traction Engine.

Every man who owns or uses traction engines or road rollers will be interested in

be used for any purpose that requires power. For instance, the engine could be kept busy crushing stone when weather conditions would not permit road work, and the contractor is enabled to arrange his work to the best advantage and economize in time and expense.

The engine will also pull the grader or scraper in the most satisfactory manner. For plowing up streets, nothing is so good



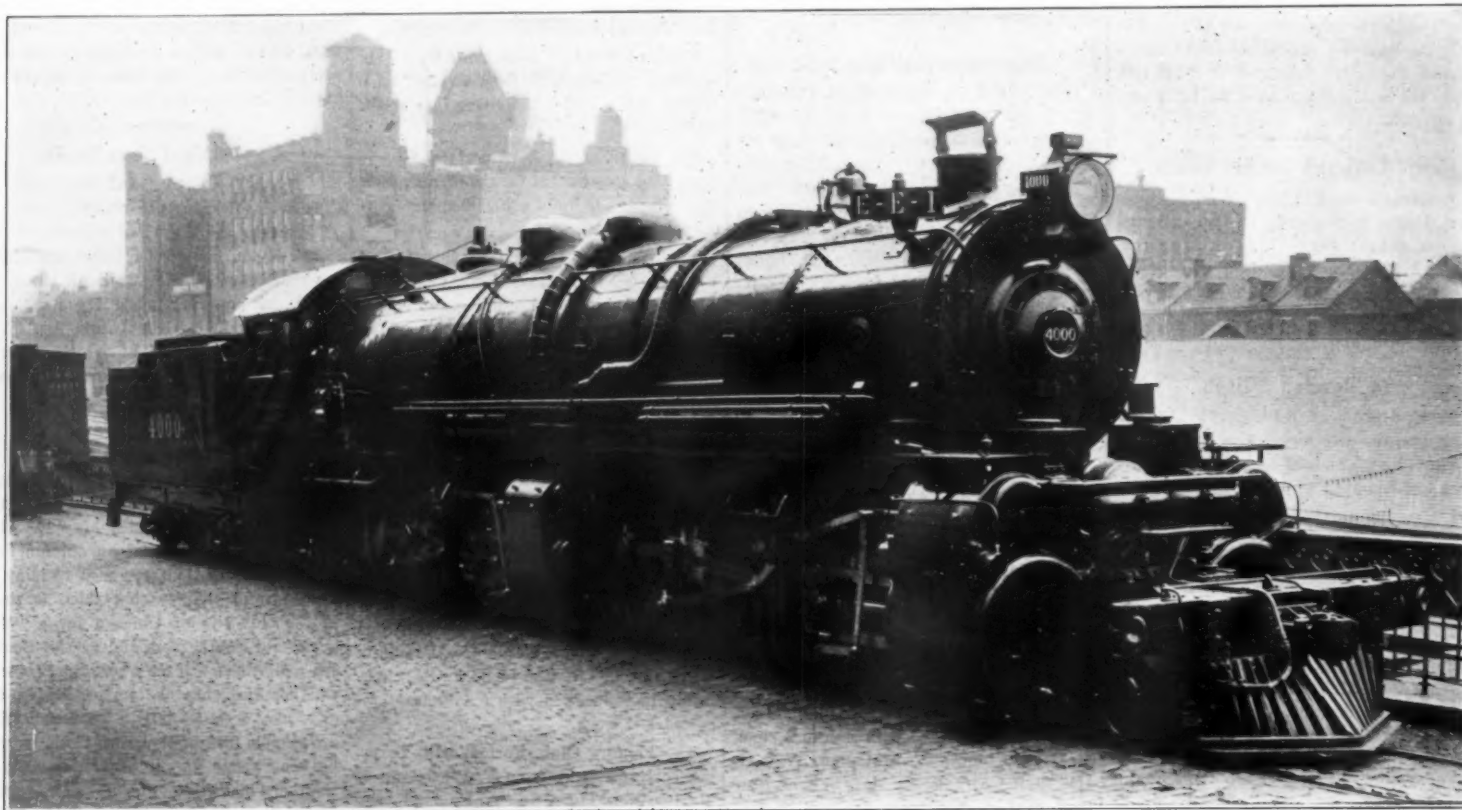
HUBER ROLLER AND TRACTION ENGINE.

longitudinal pipes, which are provided with unions, the locomotive is readily separated into two sections. This arrangement facilitates the handling of parts when making repairs. It was tested in the shops of the builders, and proved entirely feasible. The dimensions of the locomotive are as follows: Cylinders, 26 and 40x30 inches; boiler, diameter, 84 inches; steam pressure, 200 pounds; fire box, length, 126

the combination outfit illustrated herewith. This outfit can in a very short time be changed from a road roller to a road engine, or from a road engine to a road roller. This combination gives the operator several advantages. One is the great saving in the cost of equipment required to do contract work. For but little more than the price of one machine you have here the advantage of the use of

as the traction engine. The speed can be regulated as required, and the motion is steady—points that are very important in doing such work.

The engine shown is particularly adapted to street and road work, because it is simple in construction and easily handled; short and compact, so that it turns in the smallest space; its boiler is of the return-flue type, the most economical in



GIANT MALLET TYPE LOCOMOTIVE, BUILT BY BALDWIN LOCOMOTIVE WORKS.

freight traffic over the mountains in the far West. The total weight of the locomotive is approximately 430,000 pounds, of which the driving wheels carry 390,000 pounds; the tender, which runs on eight wheels, weighs about 170,000 pounds loaded, so that the total weight of the locomotive and tender is approximately 300 tons. The locomotive is equipped for burning oil, and the boiler carries a steam

inches; fire box, width, 78¼ inches; heating surface, fire box, 232 square feet; heating surface, tubes, 6161 square feet; heating surface, total, 6393 square feet; grate area, 68.4 square feet; driving wheels, diameter, 57 inches; wheelbase, driving, 39 feet 4 inches; wheelbase, total engine, 56 feet 7 inches; wheelbase, total engine and tender, 83 feet 6 inches; length, over all, 93 feet 6½ inches; weight on driving

several, and each is complete in itself.

The traction wheel cleats are all interchangeable, are fastened on with bolts, and may be easily and quickly removed, leaving the wheels smooth for rolling purposes. The front truck can be quickly taken off and the roller attachment put in place, and the steam roller is then complete. When the roller has done its work it is as quickly changed back to a traction engine, and can

the consumption of fuel and water, and the engine develops full power from the steam produced.

The first cost would be no more than the cost of horses and the necessary equipment; the expense of operation is less, and the cost of keeping while not at work is nothing. Not only that, but the engine does much more work and does it better than would be possible with any number



of horses that could be handled, and it will work day and night, if necessary, and at times when the weather would make it impossible to do anything with horses.

Another feature worthy of notice is the detachable roller. With each outfit is furnished a tongue complete. When the roller is taken off the engine and the front wheels put on the tongue can be attached to the roller, and there you have a first-class road roller to be pulled by horses. Another advantage of this is that in moving from place to place the roller can be hitched on behind the engine and the whole outfit moved together.

Thus the combination outfit gives us an engine for stationary work, such as stone crushing; a traction engine for hauling stone or for pulling grader, scraper or plow; a self-steering steam roller, and a horse-power roller.

The power steering device is a special feature. It takes the place of the old style

panying illustration presents a view of the machine. This machine is on trucks, and equipped with an electric motor of two horse-power, 440 volts, for direct current, which the Brazilian Government will obtain by connecting with street railway wires at any point where the machine is to be used. The Cement Machinery Co. of Jackson, Mich., is the manufacturer of the machine mentioned, besides an exclusive line of concrete-block and brick machines, mechanical tamping cement-brick machines, systematic mixers (of which type is the Brazilian machine mentioned) and other kindred equipments. The systematic mixer can be furnished with either three or four hoppers, all placed low for convenient shoveling. It has high wheels, is substantially built, and has a strict horizontal drive, eliminating vibration on the engine. The proportioning box can be locked with a padlock, which will prevent annoyances of which



CONCRETE MIXER FOR BRAZIL.

hand steering wheel, which requires considerable labor to manage when pulling heavy loads on rough roads. With this new attachment the operator simply moves a hand lever backward or forward, changing the direction of the engine at will; or if the lever is left at the center, it guides straight. All this is done without any appreciable exertion of strength on the part of the operator.

Another new feature is to be found in the building of the wheels. The common method of flattening the ends of the spokes and riveting them to the rims has not proven satisfactory in heavy contract work. The enormous strain on the ends of the spokes is sometimes more than they can stand. This is overcome by making a double rim for all the wheels. A heavy steel angle rim is fitted inside the regular rim at both sides. One side of this is riveted to the outside rim, and to the other side the spokes are attached by three rivets through each. This makes a most rigid attachment, and one that will stand any pulling strain.

Still another feature of this engine is the round axle. Instead of having the rear axle square, with round sleeves on which the drive wheels revolve, we make the axle round the full length and the wheels are fastened to it, so that the axle itself revolves in special boxings attached to the under side of the boiler. This reduces friction and makes the rear wheels more rigid.

The Huber Manufacturing Co., Marion, Ohio, builds this equipment.

#### Concrete Mixer for Brazil.

A leading manufacturer of cement machinery recently made an interesting shipment to the Brazilian Government. This shipment comprised a cement mixer, recently built under special specifications, for use at Rio de Janeiro. An accom-

panying illustration presents a view of the machine. This machine is on trucks, and equipped with an electric motor of two horse-power, 440 volts, for direct current, which the Brazilian Government will obtain by connecting with street railway wires at any point where the machine is to be used. The Cement Machinery Co. of Jackson, Mich., is the manufacturer of the machine mentioned, besides an exclusive line of concrete-block and brick machines, mechanical tamping cement-brick machines, systematic mixers (of which type is the Brazilian machine mentioned) and other kindred equipments. The systematic mixer can be furnished with either three or four hoppers, all placed low for convenient shoveling. It has high wheels, is substantially built, and has a strict horizontal drive, eliminating vibration on the engine. The proportioning box can be locked with a padlock, which will prevent annoyances of which

#### Standard Cement Brick Machine.

Concrete in brick form is easily and conveniently handled for construction purposes, and the result has been the development of machinery for manufacturing such brick. Concrete or cement brick are extensively used, and possess the advantage of uniformity, with sharp corner and edges, great durability and fireproof fea-



STANDARD NO. 20 CEMENT-BRICK MACHINE.

ures. Prominent in building machines for the production of cement bricks is the South Bend Machine Manufacturing Co. of South Bend, Ind. This company offers the Standard cement brick machines, concrete mixers and gas engines. Its line includes the No. 20 Standard machine illustrated herewith, and briefly described as follows: Makes 20 perfect bricks at one operation; is furnished complete with wood tamper, one straight edge, one wood

pallet, one steel-faced pallet, 20 ornamental face molds (choice of designs), with ends to match; capacity daily, with two men, 4000 bricks; with three men, 5000 bricks; floor space required, 30x64 inches. This is but one of the different outfits offered by the company, whose catalogue presents details of the other types, the concrete mixers and the gas engines. The South Bend Machine Manufacturing Co. has its general sales offices at Chicago.

#### Important Machinery Shipment.

One of the most important shipments of heavy machinery during the present year occurred March 4, when the C. & G. Cooper

nished the Tennessee Company will drive a 2500-kilowatt Crocker-Wheeler alternator, and is proportioned for carrying heavy overloads. It is practically a duplicate of the unit placed in operation at the Carnegie Steel Co.'s Duquesne works about a year ago. A similar engine is now being completed at the Cooper works for the Packard Motor Car Co. of Detroit, Mich. The Packard engine will direct drive a 2500-kilowatt Western Electric direct-current generator.

#### Southern Machinery Men.

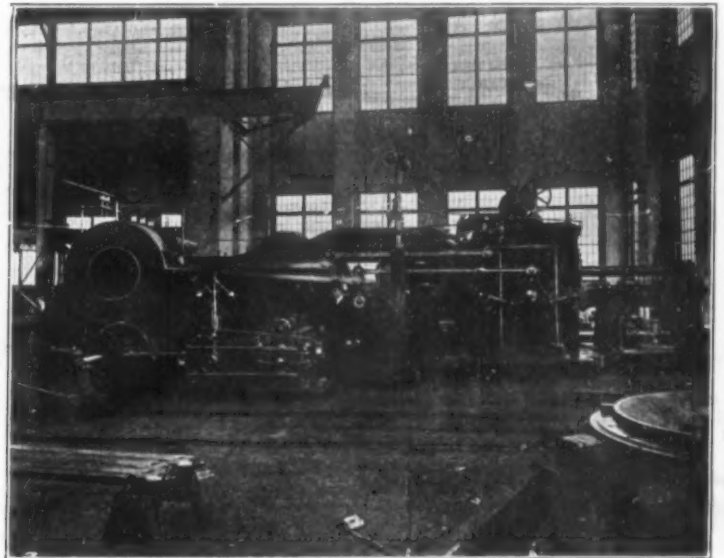
At the joint convention at Chattanooga, May 5-7 of the Southern Supply and Ma-



IMPORTANT MACHINERY SHIPMENT.

Company, Mt. Vernon, Ohio, forwarded an entire trainload of machinery to the Tennessee Coal, Iron & Railroad Co. at Ensley, Ala. The shipment consisted of a 42 and 78x54 cross-compound condensing Cooper Corliss engine, requiring 15 heavy steel cars for its transportation. An accompanying view is the train as it was photographed before leaving the Cooper works. Delivery of this engine was promised in four months from receipt of neces-

sary information to proceed with the work, but was made fully 40 days ahead of time. An accompanying illustration is a view of the high-pressure side of this engine in process of erection on one of the erecting floors of the Cooper works. A 50-horse-power simple engine built for the Franklin Foundation of Boston, Mass., which was completed about the same time, was placed beside the Tennessee engine for the sake of contrast. The engine fur-



BUILDING A BIG ENGINE.

Southern Supply and Machinery Dealers' Association; B. C. F. Aaron, on the relation of traveling men to the association's work, and by W. H. Barks, on the jobber and the manufacturer.

Mr. Oliver L. Frisbie of Portsmouth, N. H., has published in the interest of the Commercial Development Committee of his city a folder containing 50 facts of importance to would-be investors and home-seekers.

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

### BRIDGES, CULVERTS, VIADUCTS

Asheville, N. C.—Southern Railway, W. H. Wells, engineer of construction, Washington, D. C., will construct concrete viaduct over French Broad River at Asheville and steel bridge over Mill Creek near Asheville in connection with trackage improvements.

Carthage, N. C.—Moore county will issue \$16,000 bonds for bridge construction; N. A. McKelthem, chairman County Commissioners.

Charleston, S. C.—Atlantic Coast Line, E. B. Pleasants, chief engineer, Wilmington, N. C., has received order from Secretary of War, Washington, D. C., to repair bridge over Ashley River, in accordance with specifications prepared by Capt. E. M. Adams, Corps of Engineers, U. S. A., in charge of river and harbor work in South Carolina; work is to include removal of dilapidated fenders, repairing of fenders in substantial manner and providing clear width of draw openings of at least 76 feet.

Columbia, S. C.—Richland County Commissioners will be petitioned to order election for voting on issuance of \$75,000 of bonds for building or purchasing free bridges over Broad and Congaree River, between Columbia township and Lexington county; N. O. Pyles is promoting project.

Dallas, Texas.—Dallas county voted \$175,000 of bonds for remodeling of bridges across Trinity River. Address County Commissioners. (Previously mentioned.)

Fluvanna County, Va.—Bids will be opened April 29 for construction of steel bridge, 140 feet, in Fluvanna county, and reinforced concrete bridge, 30-foot span, in Warwick county. P. St. Julien Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Gadsden, Ala.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., expects to begin work within next 60 days on proposed steel bridge across Coosa River; piers now in use will be widened and strengthened.

Galveston, Texas.—Engineers connected with plans for proposed causeway to connect Galveston Island with mainland will begin

on April 30 final conferences with George E. Mann, Judge of Galveston County, and probably County Commissioners, at which detailed plans will be submitted and approved, preparatory to inviting bids on construction. Those to be present include Edwin Thatcher, president of Concrete-Steel Engineering Co., Park Row Bldg., New York, representing Galveston county; C. F. W. Felt of Galveston, chief engineer of Gulf, Colorado & Santa Fe Railway; A. R. Robinson of Chicago, bridge engineer of Santa Fe system; W. L. Locke, construction engineer of Galveston-Houston Interurban Railway, and D. K. Colburn, Houston, Texas, representing other railroads; each engineer will present detail plans on special section of work in his charge. It is expected that bids will be invited about May 1, and probably 60 days will be allowed on proposals. (Details of construction reported at various times.)

Grafton, W. Va.—Baltimore & Ohio Railroad, A. M. Kinsman, chief engineer, Charles and Baltimore Sts., Baltimore, Md., contemplates rebuilding bridge.

Hondo, Texas.—Medina county voted \$40,000 bridge and road bonds. Address County Commissioners.

Jerusalem, Md.—Harford and Baltimore counties are considering construction of bridge across Gunpowder River at Jerusalem. Address Commissioners of former county at Belair, Md., and of latter at Towson, Md.

Knoxville, Tenn.—Viaduct Committee has engaged W. H. Burke of Knoxville as consulting engineer to prepare plans and supervise construction of girder bridge across Asylum avenue; plans will provide for "Y" to West Knoxville; estimated cost, \$52,000. (Recently noted.)

Marshall, N. C.—Madison County Commissioners are having surveys made for two steel bridges; surveys will be completed by May 3, on which date Commissioners will call for bids and determine date of opening same; Dudley Chipley, County Engineer.

McAlester, Okla.—Pittsburg County Commissioners awarded contract to Kansas City (Mo.) Bridge Co., at \$10,719, for construction of six steel bridges, and to John T. Grigsby, Paris, Mo., at \$8883, for construction of seven steel bridges.

Pine Bluff, Ark.—Thomas A. Bell, St. Louis, Mo., reported to be prepared to build bridge across Arkansas River in connection with construction of proposed North & South Railroad.

Tampa, Fla.—Hillsborough county will construct trestle over Anclote River; bids to be opened May 3. Address County Commissioners. (See "Machinery Wanted.")

Yorkville, S. C.—York and Cherokee counties will construct steel bridge over Broad River above Smith's Ford; bids to be opened May 6; C. F. Gordon, Supervisor of Cherokee County, Gaffney, S. C. (See "Machinery Wanted.")

### CANNING AND PACKING PLANTS

De Queen, Ark.—De Queen Canning Co. incorporated with \$10,000 capital stock; W. H. Collins, president; A. Johnson, vice-president; T. E. Brown, secretary and treasurer.

Fort Meyers, Fla.—Lee County Packing Co. incorporated with \$50,000 capital stock; H. E. Heltman, president; John M. Dean, vice-president; W. S. Garvey, secretary and treasurer; will erect frame packing-house; will install fruit sizers, cleaners, etc.

Hermitage, Ark.—Hermitage Hardware Co., W. T. Graham, president, is interested in establishment of canning factory. (See "Machinery Wanted.")

Stuttgart, Ark.—Stuttgart Canning Co. incorporated with \$20,000 capital stock by A. J. Stevens, R. B. Gregg, J. A. Harr and others. (Previously noted.)

### CLAYWORKING PLANTS

Arkoma, Ark.—Bricks.—Brown & Yoke, Fort Smith, Ark., will establish brick plant at Arkoma.

Casar, N. C.—J. W. Towery is interested in establishment of pottery.

Cherry Hill, Md.—Paving Brick, etc.—Westport Paving Brick Co., 22 Abell Bldg., Baltimore, Md., awarded contract to Chesapeake Iron Works, Bayard and Severn Sts., Baltimore, for erection of plant at Cherry Hill; corrugated iron; 100x135 feet; will remodel plant formerly operated by Baltimore Vitri-fied Clay Co. and erect new kilns; plans by Geo. R. Morris, Equitable Bldg., Baltimore, Md. (Recently mentioned.)

Greensboro, N. C.—Brick.—Cunningham Brick Co. incorporated with \$25,000 capital stock by J. Harry Cunningham, C. D. Cunningham and W. H. Osborn.

Houston, Texas.—Bricks, Drain Tiles, etc.—Sherman Brady is preparing to establish three-press brick plant; maximum capacity, 120,000 bricks daily; five kilns each with capacity of 400,000 bricks without re-handling; will construct 800-foot switch to channel front; bricks will be handled direct from press kiln by new conveyor system; conveyors will also be utilized in loading cars from kilns; will erect clay warehouse 100x100 feet and building 60x100 feet for presses and other machinery; install equipment for manufacturing drain tile, hollow brick; fireproofing, etc.; contract for presses awarded to Anderson (Ind.) Foundry & Machine Works.

Waynesville, N. C.—Waynesville Brick & Tile Co., recently reported organized by J. C. Miller and others to establish plant with daily capacity of 20,000 bricks, has arranged for purchase of machinery; will erect two 30x60-foot buildings and an office structure; buildings to cost \$2000. (See "Machinery Wanted.")

Waynesville, N. C.—Brick, Tile, etc.—W. C. Garrison and Clarence Miller will establish plant for manufacturing brick, tile, etc.

### COAL MINES AND COKE OVENS

Blountville, Tenn.—Bewley-Darst Coal Co. incorporated with \$125,000 capital stock by Jake Bewley, Guy Darst, N. D. Buchanan, Jr., John B. Baumgartner and B. B. Burns.

Charleston, W. Va.—Queen Shoals Coal Co. incorporated with \$30,000 capital stock by W. A. MacCorkle, J. E. Chilton, J. A. Holley and others.

Fairmont, W. Va.—Pittsburg Gas & Coal Co. incorporated with \$300,000 capital stock by B. P. Porter, John F. Montgomery, W. T. Robinson and others, all of Cleveland, Ohio; main offices in Fairmont.

Fayetteville, W. Va.—Sewell Colliery Co. incorporated with \$20,000 capital stock by C. W. Dillon of Fayetteville; D. W. Boone, Lookout, W. Va.; J. A. Boone and J. D. Boone, Fayette, W. Va., and Eli J. Taylor, Nuttallburg, W. Va.

Gadsden, Ala.—T. F. Wood of Birmingham, Ala., has optioned coal and iron lands in St. Clair, Etowah and Marion counties to Michigan parties at \$555,000.

McDowell County, W. Va.—James T. McCreery, Hinton, W. Va., has secured options on 16,000 acres of coal and timber land in McDowell county; Pike county, Kentucky, and Buchanan county, Virginia.

Pembroke, P. O. Fire Creek, W. Va.—Fire Creek Collieries Co., recently noted incorporated and to have purchased nine of New River Coal Co., elected P. M. Sharples president and Miss Isabel Darlington secretary and treasurer; will increase capacity of mines from 600 to 1000 tons daily; will construct new plane, tippie and power plant. Address secretary at main office, Farmers and Mechanics' Trust Bldg., West Chester, Pa.

Spadra, Ark.—W. H. Taylor will install mining machines and resume operation of coal mines; is opening two mines, capacity of which will probably be 1000 tons daily.

### CONCRETE AND CEMENT PLANTS

Adamston, W. Va.—Biddle Concrete Co. incorporated with \$15,000 capital stock by John C. Biddle, H. C. Biddle, Edgar M. Biddle and others.

Johnson City, Tenn.—Henry R. Brown, Greeneville, Tenn., secured site, 200x250 feet, on which to erect plant for manufacturing cement blocks, cement draining tile, cement brick and roofing tile. Frank Brown will be in charge. (Recently mentioned.)

Richmond, Va.—Jamestown Portland Cement Co. incorporated with capital stock of \$1,000,000; George E. Holmes, president; B. F. Russell, vice-president; both of Brooklyn, N. Y.; J. D. Baker, secretary-treasurer, of New York.

### COTTON COMPRESSES AND GINS

Augusta, Ga.—Atlantic States Warehouse Co. will erect cotton compress for Heiniken & Vogelsang and Neely & Co., with storage facilities for 10,000 bales; will also add to warehouse new compartments to provide storage capacity for 15,000 additional bales; total cost of investment, \$150,000.

Blanco, Texas.—M. Schneider & Co. will install new outfit in his gin.

Brady, Texas.—McNally & Wells, Rosebud, Texas, will establish cotton gin.

Bryan, Texas.—Jas. O. Chance, recently reported to rebuild burned cotton gin, will erect \$6000 building, 22x50 feet; will install gin machinery costing \$3000; machinery proposals to be opened May 1. (See "Machinery Wanted.")

Charleston, S. C.—Maybank & Co. will erect cotton compress and warehouse with capacity of 1200 bales daily; cotton will discharge directly into compress and come out within 30 feet of shipside; contract for erection awarded to Webb Press Co., Ltd., Minden, La.

Cordele, Ga.—Central Oil & Fertilizer Co. will establish eight-stand cotton gin; brick; capacity, 175 bales daily.

Crenshaw, Miss.—Crenshaw Oil Co., W. M. McDade, president, contemplates changing present 3-70 saw gin outfit to two 4-70 saw and one 5-70 saw; will use hydraulic power presses in place of present screws. (See "Machinery Wanted.")

Lyons, Ga.—Garbutt & Donovan will establish cotton gin.

Paradise, Texas.—Paradise Gin Co. will receive sealed bids until May 15 for erection of ginhouse, outfit and site; T. H. Brackett, secretary. (See "Machinery Wanted.")

San Angelo, Texas.—San Angelo Gin Co. will erect additional gin at San Angelo; also contemplates establishment of gins at Hortense and Paint Rock, Texas.

Teague, Texas.—Alexander & Clark, recently noted to erect cotton gin, will establish plant of 40 bales daily capacity; will build \$1000 sheet-iron structure; cost of machinery, \$4000. (See "Machinery Wanted.")

Thorndale, Texas.—Farmers' Gin & Compress Co. organized with \$25,000 capital stock; G. Schrader, president; L. Grill, vice-president and treasurer; F. E. Stiles, secretary and manager; will establish cotton compress and gin.

Thorndale, Texas.—Farmers' Gin & Compress Co. incorporated with \$25,000 capital stock; G. Schrader, president; L. Grill, vice-president and treasurer; F. E. Stiles, secretary and manager.

West, Texas.—Farmers' Ginning Co., L. J. Sawyers, president, and N. B. McLean, secretary, will establish cotton gin recently noted (as "L. Poteate and associates"); capacity 100 bales. (See "Machinery Wanted" and "Ice and Cold-storage Plants.")

### COTTONSEED-OIL MILLS

Alice, Texas.—Alice Cotton Oil Co. incorporated with \$50,000 capital stock by P. A. Presnall, William Adams and E. H. East.

Austin, Texas.—Farmers & Ginner's Cotton Oil Co., incorporated at \$80,000, recently noted to erect plant, has begun construction; mill building, one and two stories, 124x89½ feet; brick; frame and iron seedhouse and hullhouse; 4-press machinery, 10 lifters, Casey-Hedges water-tube boilers, Monarch Corliss engine, 20x42; to be in operation by fall; J. H. Mettenheimer, secretary-manager, in charge of purchases and material, building construction, etc.

Mooresboro, N. C.—S. S. Royster interested in plant to build cottonseed-oil mill. (See "Machinery Wanted.")

Runge, Texas.—Runge Cotton Oil Co., recently noted organized, will establish three-press plant of 60 tons daily capacity; capital stock, \$60,000; E. G. Gillett, president; W. W. Boyce, vice-president; Wm. Heberer, secretary and treasurer.

Tulsa, Okla.—Tulsa Cottonseed-Oil Co., recently noted organized and to establish plant, will erect three buildings; two wooden buildings, 250x60 feet and 80x30 feet, and one brick building 160x60 feet; will install machinery to cost about \$40,000, establish refinery and manufacture by-products of the seed; cost \$80,000.

West Point, Miss.—Wiley S. Keyes is interested in establishment of cold-pressed oil mill to be capitalized at \$65,000.

### ELECTRIC-LIGHT AND POWER PLANTS

Americus, Ga.—Electric-light and water committee employed E. H. Davis, Griffin, Ga., to prepare plans and specifications for municipal electric plant; (\$40,000 bond issue recently noted.)



Bristol, Va.-Tenn.—Theodore Swann has options on two water-power sites, franchises from the two Bristols and contracts to amount of \$80,000 per year for light and power; plans to develop 3000 horse-power and has sold 2000 horse-power; no other details ready.

Camp Hill, Ala.—City voted \$10,000 of bonds for construction of electric-light plant. Address The Mayor.

Greenville, Tenn.—P. C. Ottlinger is not interested in plan to construct water-power electrical plant on French Broad River; recently mentioned rumor was an error.

Hattiesburg, Miss.—Hattiesburg Traction Co., C. Z. Stevens, general manager, awarded contract to A. M. Hewes, Monadnock Bldg., Chicago, Ill., for erection and equipment of power-station building; machinery will include 500-kilowatt direct-connected generating unit, 325-kilowatt direct-connected generating unit, 150-kilowatt motor generator set and three 250-horse-power water-tube boilers; power station is to be built of brick and concrete. There will also be four cars, with necessary electrical equipment, 6 miles of overhead electrical construction, 11 railroad crossings and about half mile of new track; balance of trackage is already laid; plant is of steam installation; most of machinery has been purchased, and it is expected to let building contract for power station within about four weeks; work is to be finished by August 15; R. A. Pratt, in employ of Mr. Hewes, is engineer in charge. (Recent statement contract awarded Electrical Installation Co. of Chicago was erroneous.)

Hubbard, Texas.—City awarded contract to G. T. Blackford, Knoxville, Tenn., at \$499,550 for construction of proposed electric-light plant and water-works to supply five towns with water and light; work will include construction of concrete power-house, etc.; W. H. Bass of Hubbard prepared plans. (See "Water-works.")

Humboldt, Tenn.—Missouri, Tennessee & Georgia Railroad, I. H. Dungan, president, will erect power station for lighting and other purposes.

Lexington, S. C.—W. P. Roof may be addressed for information relative to contemplated construction of electric-light plant and water-works recently mentioned.

Lexington, Tenn.—City is considering construction of electric-light plant. Address The Mayor.

Lexington, Ky.—Silas Shelburne & Son will install electric-power plant in basement of tobacco warehouse to be erected. (See "Warehouses.")

Mount Calm, Texas.—Mount Calm Water & Light Co. organized with \$5000 capital stock; J. H. Morgan, president. (See "Water-works.")

Ripley, Tenn.—Ripley Light, Water & Ice Co. will improve light plant. (See "Ice and Cold-storage Plants.")

Rockdale, Texas.—Rockdale-Florence Interurban (proposed line) contemplates construction of power plant and equipment; H. C. Meyer, president.

Sapulpa, Okla.—City will vote on issuance of \$40,000 electric-light and water-works bonds. Address The Mayor.

Valdosta, Ga.—City has voted issuance of \$20,000 of bonds for increasing number of electric lights, etc. Address The Mayor. (See "Water-works.")

Wake Forest, N. C.—City voted \$15,000 of bonds for construction of electric-light plant for college and city. Address The Mayor.

Washington, N. C.—Washington Investment Co., W. E. Jones, general manager, is name of company that will construct and control railroad and electric-power plant, for which contract was recently reported awarded to R. W. Marshall & Co. of Traction Engineering Co., New York; capacity 500 horse-power; franchise provides for sale of power to city, but not lighting; contract for building and complete equipment has been awarded; F. P. Massey is engineer in charge; actual construction to begin April 20 and be completed August 1.

Weston, W. Va.—George I. Keener is considering erection of power station near Weston in connection with electric railway.

## FLOUR, FEED AND MEAL MILLS

Chillicothe, Texas.—Rutherford Mill & Elevator Co. incorporated with \$25,000 capital stock by J. M. Rutherford, M. M. Rutherford and R. A. Morgan.

Cosby, Tenn.—Joe Padgett and Harrison Shults, R. F. D. No. 1, will establish mill.

Limestone, Tenn.—Williams Bros., Cosby, Tenn., have purchased mill of W. N. Mitchell at Limestone; will make improvements to mill, including installation of sifter.

Ocala, Fla.—George H. Ford interested in plan to install equipment for shucking, shelling and sacking corn. (See "Warehouses.")

Richmond, Texas.—M. L. Wooley will erect grist mill.

Springfield, Mo.—John F. Meyer & Sons will remodel and increase capacity of Queen City Mill; will install additional grinding, bolting and purifying machines; capacity to be 1000 barrels daily; will also install additional cleaners; contract for improvements awarded to Great Western Manufacturing Co., Leavenworth, Kan.

West Point, Miss.—Wiley S. Keyes is interested in establishment of alfalfa mill.

Weston, W. Va.—High Land Distributing Co. incorporated with \$25,000 capital stock by W. W. Brannon, Lloyd Beeghley, Claude Rinehart and others.

## FOUNDRY AND MACHINE PLANTS

Charlotte, N. C.—Southern Brass Manufacturing Co. organized by Walter Fielding, Boston, Mass., to establish brass foundry.

Louisville, Ky.—Brass Foundry.—Benjamin Howe has purchased plant of Howe Manufacturing Co., consisting of two acres of land, three-story building 66x300 feet, and three large outbuildings, and will establish brass foundry.

Quitman, Ga.—Foundry & Machine Shop.—F. C. Underwood and O. L. Hughes, Monticello, Fla., have purchased plant of Quitman Manufacturing Co.; will remove Monticello plant to Quitman and install.

St. Louis, Mo.—Centrifugal Machines.—Fleegee Manufacturing Co., recently reported incorporated with \$32,000 capital stock, will not at present erect plant; will place contracts for manufacture of centrifugal machines for cream separating and bacteriological purposes. Wm. Elder may be addressed. (See "Machinery Wanted.")

Temple, Texas.—Foundry.—Temple Foundry & Machine Co. incorporated with \$10,000 capital stock by H. Brockmeyer, Ed. Winston and B. L. Williams.

Temple, Texas.—Iron Works.—Temple Iron Works will rebuild burned plant; machine shop 24x60 feet; repair shop 20x30 feet; ordinary construction; cost of buildings \$1200; will install 14-inch lathe, 8-foot bed; 28-inch or 30-inch band saw; 26-inch sliding-head drill and machine and hand tools; foundry capacity, six to eight tons weekly. Recently noted. (See "Machinery Wanted.")

Wheeling, W. Va.—Iron Works.—Agricultural Iron & Wire Work Co., recently noted to erect addition and improve plant, has mainly purchased additional machinery needed; construction by company's force; improvements to cost \$5000.

## GAS AND OIL DEVELOPMENTS

Charleston, W. Va.—Green Rock Oil Co. incorporated with \$40,000 capital stock by John A. Thayer, A. L. Guthrie, L. J. Falone and others.

Fairmont, W. Va.—Pittsburg Gas & Coal Co. incorporated with \$300,000 capital stock by B. P. Porter, John F. Montgomery, W. T. Robinson and others, all of Cleveland, Ohio; main office, Fairmont.

Jonesboro, Ark.—Gay Oil Co. is planning to erect warehouse and install three large oil tanks.

Milton, Okla.—Milton Oil Co., Box 354, Muskogee, Okla., recently noted incorporated (under Tulsa, Okla.) with \$10,000 capital stock, will establish plant in Milton; plans not matured; Wm. S. Harsha, president; W. D. Ford, vice-president; C. L. Stoner, treasurer; J. Erwin Page, Muskogee, Okla., architect and engineer.

Morgantown, W. Va.—Donald Oil Co. incorporated with \$10,000 capital stock by J. K. Buckanan, D. F. Dusenberry, G. E. Titus and others.

Muskogee, Okla.—Stoker Oil Co. incorporated with \$10,000 capital stock by George S. Ramsey, Ed. Hirsch and N. W. Palmer.

Parkersburg, W. Va.—C. E. Sarber Oil & Gas Co. incorporated with \$40,000 capital stock by C. E. Sarber, S. B. Crawford, R. E. Mumaugh and others.

Shreveport, La.—Wolf Drilling Co. incorporated with \$25,000 capital stock; W. C. Wolf, president and secretary; H. E. Lehman, vice-president and treasurer.

Tulsa, Okla.—Oklahoma Oil & Gas Co. incorporated with \$10,000 capital stock by T. C. Oyster, J. P. Glenn, both of Lexington, Ky., and Charles Richardson, Tulsa.

Tulsa, Okla.—Albrecht Oil Co. incorporated with \$50,000 capital stock by J. W. Albrecht, Gulfport, Miss.; E. J. Slater, E. W. Wells, both of Tulsa, and others.

## ICE AND COLD-STORAGE PLANTS

Athens, Tenn.—H. C. Russell and associates have formed company to build 15-ton ice plant; have not bought machinery. (See "Machinery Wanted.")

Brady, Texas.—Brady Ice Co., recently reported incorporated, will operate ice plant of from five to seven tons daily capacity; will erect frame building costing within \$1000; cost of machinery, \$4000; T. J. Wood, president; S. J. Kimbrough, vice-president and general manager; S. W. Moffatt, secretary; W. H. Ballou, treasurer.

Elizabethton, Tenn.—W. E. Hunter will establish cold-storage plant; two stories; brick; cost \$10,000.

Morristown, Tenn.—Morristown Produce & Ice Co. has purchased plant of Carter, Grubb & Co.; will expend \$25,000 for improvements, install new 25-ton ice machine and erect addition to feeding station, giving it added capacity of several thousand; will increase capital stock from \$10,000 to \$50,000 or \$60,000.

New Orleans, La.—Lincoln Company incorporated with \$3000 capital stock by C. H. Lincoln, Jr., Thomas F. Gesner and Joseph Sinal.

Ripley, Tenn.—Ripley Light, Water & Ice Co. will erect new plant; has increased capital stock \$5000; will improve light and water plant and double capacity of ice plant.

San Antonio, Texas.—Merchants' Ice & Cold Storage Co., recently reported incorporated with \$75,000 capital stock by George B. Marshall, Louisville, Ky., and others, will increase capital stock to \$100,000 and erect five-story structure instead of three stories; reinforced concrete and brick; light-draught and dead-air specifications; 104x208 feet; will have own refrigerating plant.

West, Texas.—West Cold-Storage Co., E. Archie, president, and N. B. McLean, secretary, will establish 10 to 12-ton ice plant; will erect \$1500 building of mill construction for ice plant and cotton gin; will purchase and install machinery costing within \$10,000. (See "Machinery Wanted" and "Cotton Compresses and Gins.")

Whiteville, N. C.—Whiteville Ice Co. incorporated with \$5000 capital stock by J. D. Lewis and others.

## IRON AND STEEL PLANTS

Atlanta, Ga.—Bridge Work.—Virginia Bridge & Iron Co., C. Edwin Michael, president, Roanoke, Va., will locate proposed branch plant at Atlanta; to have monthly capacity of 500 tons finished product of bridges and structural steel for buildings; shop building will be of structural steel and practically fireproof; office building of frame construction; shop equipment, electrically driven, has been purchased, and includes 10-ton locomotive crane; foundation and grading contracts will be completed in 10 days and steel structure for plant delivered in two weeks; plant ready for operation by May 15. Jules W. Leroux is district manager, 334 Equitable Bldg., Atlanta.

Birmingham, Ala.—Iron Furnace.—Sayre Manufacturing Co., Sayre, Ala., has leased and will operate Williamson blast furnace; now manufacturing 90 to 100 tons of iron daily.

Sparrows Point, Md.—Open-hearth Plant.—Maryland Steel Co., F. W. Wood, president, will, it is reported, build open-hearth steel plant, costing \$1,000,000, for production of rails, etc.; tentative plans being prepared, but date for beginning construction not decided.

St. Louis, Mo.—Iron Furnace.—Ruby Mountain Iron & Furnace Co. incorporated with \$100,000 capital stock by W. H. Baumann, E. T. Slevin, John A. Ryan and others.

## LUMBER-MANUFACTURING PLANTS

Austin, Texas.—Austin Lumber Co. incorporated with \$10,000 capital stock by P. A. Pressball, William Adams and E. H. East.

Austin, Texas.—Austin Lumber Co. incorporated with \$10,000 capital stock by George C. Christian, George E. Christian, both of Austin, and Ed. A. Christian, San Antonio.

Bannockburn, S. C.—Bannockburn Mercantile & Lumber Co. will rebuild planing mill and drykiln to replace burned structures. (Recently incorrectly noted under Florence, S. C., as sawmill.)

Bartow, W. Va.—Bartow Lumber Co. incorporated with \$20,000 capital stock by J. B. Flint, Pittsburgh, Pa.; M. E. Hukil, Dunlevie, W. Va.; J. C. Munson, Connellsville, Pa., and others.

Charleston, W. Va.—Big Four Hardwood Co. incorporated with \$100,000 capital stock by D. G. Courtney, G. G. Roberts, S. P. Courtney and others.

Charlottesville, Va.—King Lumber Co. will erect office building and addition to plant; cost \$10,000.

Dermott, Ark.—Leavitt Land & Lumber Co. organized with J. G. Leavitt, president; Wm. H. Morris, vice-president; H. B. Leavitt, treasurer; J. G. Mack, secretary; will establish single-band hardwood mill with capacity of 40,000 feet; cost \$100,000.

Egypt, Ga.—C. D. Benedict, Peoria, Ill., and associates have purchased plant of Foy Lumber Co. and 25,000 acres of land near Egypt.

Ellisville, Miss.—Interstate Timber Co., recently reported incorporated at Atlanta, Ga., has organized with \$50,000 capital stock; Rolfe Hunt, president; Edward Young Clarke, treasurer, both of Atlanta, Ga.; T. W. Collins, Ellisville, vice-president and general manager; has purchased 2300 acres of timber land near Ellisville and will establish shingle, sawmill and planer; will conduct general timber business; is member of Interstate Enterprises; Edward Young Clarke, superintendent, 12 S. Pryor St., Atlanta, Ga.

Enid, Okla.—Davis-Waters Lumber Co. incorporated with \$50,000 capital stock by A. W. McQuilkin, Henry Davis, Henry Waters and others.

Franklin, La.—Gulf Timber Co., Ltd., incorporated with \$10,000 capital stock; E. B. Spiller, president; Thomas A. Bodin, vice-president; C. F. Morrison, secretary and treasurer.

Fullerton, La.—Gulf Lumber Co. awarded contract to McDonough Manufacturing Co., Eau Claire, Wis., for construction of steel and concrete mill, mentioned in February; 64x212 feet; capacity 400,000 feet daily; cost \$125,000; M. L. Fleishel, vice-president and general manager; offices also at St. Louis, Mo.

Jefferson County, Miss.—Bay Lumber Co., New Orleans, La., has purchased 12,000 acres of timber land in Jefferson county, Miss., for \$165,000 and will establish mill with capacity of 100,000 feet daily; will construct standard-gauge logging road; machinery and road arranged for; cost \$125,000.

Kansas City, Mo.—Choctaw Lumber Co. incorporated with \$1,000,000 capital stock by Hans Dierkes, Herman Dierkes, N. F. Allen and others.

Livingston Parish, La.—Frost-Johnson Lumber Co., St. Louis, Mo., has purchased timber lands in Livingston parish and will establish mill.

Lonoke, Ark.—Lonoke Lumber Co. incorporated with \$10,000 capital stock by E. C. Nowlin, A. H. Fitch, J. B. Robinson and E. C. Nowlin.

Louisville, Ky.—H. A. Theobald & Son will rebuild planing mill, reported burned; loss \$2500.

Marion, S. C.—Southern Carolina Lumber Co., recently reported incorporated with \$1,200,000 capital, will operate sawmill, planing-mill, drykilns, box factory and veneer mills; machinery all purchased; capacity 75,000 feet, 10-hour run; C. E. Gill, president.

McDowell County, W. Va.—James T. McCreery, Hinton, W. Va., and others have option on over 16,000 acres of timber and coal lands in McDowell county, West Virginia; Pike county, Kentucky, and Buchanan county, Virginia.

Memphis, Tenn.—The Yellow Pine Lumber Co. incorporated with \$5000 capital stock by E. B. Causey, A. E. Wallis and Gus Reder.

Middleburg, N. C.—Middleburg Lumber Co. incorporated with \$10,000 capital stock; P. G. Sturgis, president; H. M. Church, secretary-treasurer; C. A. Rose, general manager; will erect \$1000 40x60-foot building; wood with iron roof; machinery purchased; will manufacture builders' supplies; capacity one car daily.

Nacogdoches, Texas.—Hayward Lumber Co., E. H. Hayward, president, recently noted to rebuild burned lumber plant, will erect two-band mill, 60x90 feet; cost \$8000; cost of machinery \$30,000; daily capacity 100,000 feet yellow-pine lumber; power plant not destroyed.

Patterson, La.—F. B. Williams Cypress Co. has begun construction of planing mill and will begin laying sawmill foundations within 30 days; this mill to have two bandsaws, resaw, two edgers and two trimmers, for daily capacity 140,000 feet of lumber; mill machinery purchased from Filer & Stowell Co., Milwaukee, Wis., and boilers from Casey-Hedges Company, Chattanooga, Tenn.; J. J. Monaghan of Filer & Stowell Company in charge of engineering and architectural details, has prepared mill plans; bids for construction mill building of steel will be opened May 24; possibly may not build of steel; J. F. Wakefield, Patterson, in charge of installation. (Mentioned in January.)

Pearl River, La.—Schneider Bros. (H. J.

and B. A. Schneider) will establish sawmill recently noted (under St. Joseph, La.); daily capacity, about 20,000 feet yellow-pine lumber; machinery proposals to be opened in May. (See "Machinery Wanted.")

Port Arthur, Texas.—Port Arthur Planing Mill Co. incorporated with \$20,000 capital stock by C. E. Smith, George M. Craig and S. O. Latimer. (Recently mentioned.)

St. Louis, Mo.—Clayton Road Lumber & Supply Co. incorporated with \$5000 capital stock by J. B. Muth, Joseph P. Muth, W. G. Muth and others.

Swannanoa, N. C.—Mount Mitchell Lumber Co. incorporated with \$30,000 capital stock by G. H. Mell, L. E. Reighard and others.

Terrell, Texas.—O. F. Walton Lumber Co. incorporated with \$25,000 capital stock by O. F. Walton, John S. Turner, Gus Watkins and L. A. Bryan.

Victoria, Texas.—Victoria Cabinet & Mill Work Co. will erect planing mill 30x90 feet. (See "Woodworking Plants.")

Wrigley, Ky.—Reese-Kitchen Lumber Co. incorporated with \$25,000 capital stock by John W. Kitchen, S. B. Reese and Charles J. Kitchen, all of Ashland, Ky.; will establish band mill with capacity of 25,000 to 30,000 feet daily; is constructing three miles of railroad; general offices, Ashland; mill office, Wrigley. (Recently mentioned.)

### MINING

Burkittsville, Md.—Silicon.—S. E. Horine is understood to be planning development of silicon deposits.

Cave Springs, Mo.—Lead and Zinc.—Herald Lead & Zinc Co. will install large capacity electric hoist at incline shaft and will sink shaft from upper to lower levels, to facilitate loading skips.

Dallas, Texas.—Copper.—Natividad Copper Co. incorporated with \$10,000 capital stock by Isaac B. Walker, Daniel Head and Alvah M. Walker.

Duenweg, Mo.—Lead and Zinc.—O. F. & L. Mining Co. incorporated with \$30,000 capital stock by L. W. Smith, W. J. Owen, F. L. Francis and others.

Front Royal, Va.—Royal Mining Co. incorporated with \$30,000 capital stock; John Ehmann, president; H. D. Kalsner, secretary and treasurer; both of Philadelphia, Pa.

Gadsden, Ala.—Iron.—T. F. Wood of Birmingham, Ala., has optioned iron and coal lands in St. Clair, Etowah and Marion counties to Michigan parties at \$555,000.

Hamakertown, Va.—Iron.—Willis & Nutson of New York city will, it is rumored, develop iron-ore lands near Hamakertown.

Joplin, Mo.—Lead and Zinc.—Blake Mining Co. incorporated with \$50,000 capital stock by J. E. Blake, J. R. Nowland, C. D. Shadrick and others.

Llano, Texas.—Los Almagres Mining Co. incorporated with \$6500 capital stock by W. H. Gaston, J. Barlow, both of Dallas, Texas; Fernando Miller, Lampasas, Texas, and others.

Martinsburg, W. Va.—Limestone.—Jones & Laughlin Company, Pittsburgh, Pa., will develop limestone deposits near Martinsburg; has commenced to strip stone on Nicholas Paulding tract for erection of necessary buildings.

Miami, Okla.—Quapaw Metals Co. incorporated with \$50,000 capital stock by George S. Dent, J. B. Smithhiser, both of Danville, Kans.; G. W. Farnshaw, Miami, and others.

Paducah, Ky.—Gravel.—Greenville Gravel Co. incorporated with \$7500 capital stock; F. W. Katterjohn, president; W. R. Katterjohn, vice-president; W. F. Paxton, secretary and treasurer.

### MISCELLANEOUS CONSTRUCTION WORK

Augusta, Ga.—Levee, etc.—Nisbet Wingfield, Commissioner of Public Works, has about completed specifications for improvement work to protect city in future from floods and invites bids, to be opened by River and Canal Commission for Protection of City, until May 12; certified check \$250; work outlined by commission is as follows: Raising masonry of bulkheads at locks; raising and reinforcing earth bank along the canal; constructing masonry retaining wall along portion of tow-path; paving with stone certain portions of canal bank; surfacing and paving portion of Hawks Gully; surfacing and paving portion of south bank of Savannah river from Hawks Gully east. There will be required 160 cubic yards of rubble masonry, 60,000 cubic yards of earth, 30,000 cubic feet of brick masonry in wall, 2000 square yards of paving on canal bank, 2000 cubic yards of earth surfacing on Hawks Gully and river bank, 12,000 square yards of

paying on Hawks Gully and river bank. (Recently mentioned. See "Machinery Wanted.")

Baltimore, Md.—Bulkhead.—City will open bids April 28 for construction of timber bulkhead at old marine hospital property; O. F. Lackey, harbor engineer. (See "Machinery Wanted.")

Barstow, Texas.—Drainage.—Barstow drainage district will open bids May 18 for construction of proposed drainage system, for which \$50,000 of bonds have been voted; T. B. Anderson, J. J. Walker and C. E. Nichol, commissioners. (See "Machinery Wanted.")

Blessing, Texas.—Canal.—Co-operative Canal Co. incorporated with \$30,000 capital stock by J. O. Murphy, J. W. Spencer and John W. Gaines.

Chattanooga, Tenn.—Tunnel.—Mission Ridge Tunnel Commission, A. J. Gahagan, chairman, awarded contract to Thomas McFarland, Knoxville, Tenn., at \$82,500 for completion of Mission Ridge tunnel. (Recently mentioned.)

Galveston, Texas.—Pier.—Beach Fishing & Amusement Co. incorporated with \$10,000 capital stock by J. C. Gonzales, Z. L. White and J. W. Munn; has secured franchise to erect pier 1000 feet long at foot of 22d street.

Houston, Texas.—Wharf.—The Texas Company awarded contract to A. N. Fitzgerald of Houston for construction of 150-foot wharf or bulkhead; reported company contemplates dredging slip into river bank and erecting warehouse in connection.

Key West, Fla.—Quay Wall.—Bids will be opened May 1 for construction of concrete quay wall at naval station, Key West. R. C. Hollyday, chief of bureau. (See "Machinery Wanted.")

Port Bolivar, Texas.—Wharf.—Gulf & Interstate Railway of Texas awarded contract to Bowden & Worth, Galveston, Texas, for construction of wharf shed on pier recently completed at Port Bolivar; shed will be erected on piling; will be 142 feet wide by 800 feet long, one story high, and built with cupola; 16-inch fire wall will be constructed across center, which will be fitted with fusible hinged doors to close automatically upon certain degree of heat being reached; roof will receive coating of shell; flooring of vitrified brick, laid on sand filling; estimated that 500,000 feet of lumber will be required and 200 piles used for foundation.

Washington, D. C.—Wall.—Johnson Construction Co., Knoxville, Tenn., has contract at \$168 for rebuilding wall around National Cemetery.

### MISCELLANEOUS ENTERPRISES

Atlanta, Ga.—Publishing.—Pilot Publishing Co. incorporated by Jake Wells, H. L. Cardoza and Cleve W. Upchurch.

Atlanta, Ga.—Land Improvement.—Central Real Estate Co. incorporated with \$25,000 capital stock by R. A. Hemphill, M. Frank, G. G. Black and others.

Atlanta, Ga.—Automobiles.—Ford Automobile Agency incorporated with \$10,000 capital stock by M. C. Hule and A. J. Langford.

Atlanta, Ga.—Farming.—Interstate Farm, recently reported incorporated with \$25,000 capital stock, contemplates operation of dairy, poultry and truck farm; Rolfe Hunt, president; Edward Young Clarke, treasurer; is member of Interstate Enterprises, Edward Young Clarke, superintendent, 12 South Pryor St., Atlanta. Address Manager, Interstate Farm, Box 833.

Baltimore, Md.—Land Improvement.—Friedrick W. Hill, Boston, Mass., representing Boston and Montreal capitalists, has purchased for development 263 acres of land adjoining Garden City Estates.

Basic City, Va.—Fruit Cultivation.—Brookville Orchard Co. incorporated with \$25,000 capital stock; R. L. Frye, president, Rio, W. Va.; W. H. Gardner, treasurer; George McCraig, secretary, both of Basic City.

Birmingham, Ala.—Land Improvement.—Minge Mortgage & Realty Co. incorporated with \$25,000 capital stock; John H. Minge, president and treasurer; R. S. Minge, secretary.

Birmingham, Ala.—Publishing.—The Age-Herald awarded contract to Charles M. Allen, Birmingham, for erection of proposed printing plant and office building; four stories and basement; Renaissance style; terra-cotta and tan mottled brick base; entire front trimmed with terra-cotta except mottled brick shafts on each side; center of building up to third story will be almost solid plate glass set in verd antique iron; heavy terra-cotta cornice and frieze; Renaissance door surmounted by large clock in pediment, on which will rest terra-cotta globe; lobby will have Mosaic tile floor of antique design; counting-room 28x39 feet; concrete vault will extend from basement up

through mezzanine floor with opening on each landing; plate glass across entire width of building in rear of lobby; basement 20 feet high, 15 feet above street level, will contain two presses, sextuple and quadruple, with combined capacity of over 100,000 eight-page papers hourly; automatic copy carriers, plate elevators, paper chutes, etc., in all departments, operated by electricity; composing-room and stereotyping department separated by fireproof wall; electric elevators; linotype machines operated by individual motor; concrete floors and walls; fireproof; 16,800 square feet floor space; 42x80 feet; plans by William C. Weston, Birmingham. (Noted in December.)

Birmingham, Ala.—Land Improvement.—Colonial Investment Co. incorporated with \$5000 capital stock; John V. Coe, president and treasurer; Thomas Wingfield, vice-president; Roland L. Lide, secretary and treasurer.

Charlotte, N. C.—Publishing.—Record Publishing Co. incorporated with \$10,000 capital stock by E. M. Darlington, R. B. Wilson and W. W. Watt, Jr.; offices, 211 North Tryon street.

Chattanooga, Tenn.—Steam Laundry.—American Steam Laundry has taken over Standard Steam Laundry and will increase capital stock from \$15,000 to \$25,000.

Clarksburg, W. Va.—Land Improvement.—Arbutus Land Co. incorporated with \$10,000 capital stock by W. H. Lewis, A. R. Timberlake, Elwood M. Wilson and others.

Corsicana, Texas.—Steam Laundry.—Corsicana Steam Laundry Co. incorporated with \$25,000 capital stock by E. D. McCarver, Roy Canady and James L. Roxburgh.

Fort Worth, Texas.—Contracting.—Innis-Graham Construction Co. incorporated with \$10,000 capital stock by J. M. Innis, M. R. Graham and W. M. Graham.

Fort Worth, Texas.—Printing.—Bryce & Newell, Fort Worth, have contract for erection of building to be occupied by Texas Stockmen's Journal, National Co-Operator and Reimer's Engraving Co.; two stories; brick.

Greensboro, N. C.—Land Improvement.—Summitt Avenue Building Co. incorporated with \$100,000 capital stock by Caesar Cone, Julius Cone and Bernard Cone.

Hansford, Texas.—Townsite.—Hansford Townsite Co. incorporated with \$12,000 capital stock by J. H. Wright, J. E. Hays, S. G. Ward and others.

Joplin, Mo.—Sludging.—Joplin Sludging Co. incorporated with \$50,000 capital stock by C. W. Theurer, Charles Kennedy, J. D. Dickson and others.

Kentucky.—Land Development.—Chicago Construction Co., 57 Dexter Bldg., 84 Adams St., Chicago, Ill., O. G. Wales, manager, contemplates organization of Trio State Land Co.; to operate in Kentucky, Tennessee and Alabama.

Kingsport, Tenn.—Land Improvement.—Emory River Land Co. incorporated with \$10,000 capital stock by G. W. Chandler, L. O. Scott, M. Stowers and others.

Little Rock, Ark.—Garage.—Union Auto Co., 407 West 5th St., recently reported incorporated, has had plans prepared by and awarded contract to H. A. Bowman, Little Rock, for erection of garage; 44x140 feet; fireproof construction; cost \$4400.

Louisville, Ky.—Amusement Park.—River-view Park Co. incorporated with \$150,000 capital stock by Louis Steuerle, Ray Bizot and Robert L. Higgins; will take over park of White City Co.

Macon, Ga.—Lighting.—Georgia Lighting Co., 456 2d St., recently reported incorporated with \$10,000 capital stock, will conduct general distributing gasoline and kerosene lighting business; A. J. Smith, manager. (See "Machinery Wanted.")

McGehee, Ark.—Auto Livery.—Crenshaw-Mills Auto-Livery Co. incorporated with \$6000 capital stock by Winston Crenshaw, Roy Mills and Abner McGehee, Jr.

Mt. Pleasant, Texas.—Health and Pleasure Resort.—Red Mineral Springs Development Co., recently reported incorporated with \$150,000 capital stock, will conduct Red Mineral Springs in Dellwood Park; T. M. Fleming, president; S. Brown, vice-president; W. H. Florrey, secretary and treasurer; W. C. Wolf, manager.

Nacogdoches, Texas.—Land Development.—Interstate Colony incorporated with \$50,000 capital stock; Rolfe Hunt, president, and Edward Young Clarke, treasurer, both of Atlanta, Ga.; Alton G. Smith, Room 17 Commercial Bank Bldg., Nacogdoches, general manager; owns 2000 acres of land in Nacogdoches county; will develop manufacturing enterprises and colony; is member of "Interstate Enterprises," Edward Young Clarke,

superintendent, 12 South Pryor St., Atlanta.

Nashville, Tenn.—Publishing.—American Company has increased capital stock from \$150,000 to \$350,000.

New Orleans, La.—Wireless Station.—United Fruit Co., C. H. Ellis, local manager, will establish wireless station to replace present plant; 25 kilowatts; will erect steel tower 250 feet high, equipped with large dynamo.

New Orleans, La.—Contracting.—Delta Contracting Co. incorporated with \$25,000 capital stock by Herman W. McLean, Benjamin F. Burke and Mrs. Amos T. Stevenson.

New Orleans, La.—Commission.—Richard Meyer Company incorporated with \$25,000 capital stock; Richard Meyer, president; Albert Lafonta, vice-president and treasurer; Rudolph Schulze, secretary.

New Orleans, La.—Land Improvement.—Edgewood Improvement Co. organized with \$100,000 capital stock by Hunter C. Leake, George H. Dunbar, James O. Butler and others to develop Dennis Sheen tract on Gentilly road. (Recently mentioned.)

Suffolk, Va.—Machinery and Supplies.—Nanemond Machine Co. incorporated with \$50,000 capital stock; T. M. Lilliston, president; R. R. Harrell, vice-president; J. H. Lilliston, secretary and treasurer.

Oklahoma City, Okla.—Land Development.—Missouri Development Co. incorporated with \$25,000 capital stock by F. L. Gast, Edwin Bancroft, D. C. Sprout and others.

Raleigh, N. C.—Laundry.—State Hospital Commission will open bids April 26 for erection of laundry building and necessary laundry machinery for same; W. A. Erwin, chairman building committee, West Durham, N. C. (See "Machinery Wanted.")

Richmond, Va.—Hoenninger-Sizemore Company incorporated with \$25,000 capital stock; F. C. Hoenninger, president; T. W. Hoenninger, vice-president; W. L. Sizemore, secretary and treasurer.

Rosano, Va.—Land Improvement.—Franklin Investment Co. incorporated with \$10,000 capital stock; E. W. Tinsley, president; T. L. Engleby, vice-president; W. L. Tinsley, secretary and treasurer.

San Antonio, Texas.—Townsite.—First Townsite Co. incorporated with \$10,000 capital stock by Carl Kurb, R. B. Touchstone, E. P. Simmons and others.

San Antonio, Texas.—Land Improvement.—Texas Land Corporation incorporated with \$20,000 capital stock by Van A. Webster, Robert Maverick and H. B. Andrews.

San Mateo, Fla.—Fruit Cultivation.—San Mateo Fruit Co. has increased capital stock to \$100,000 to purchase orange-grove property and erect 50-room hotel.

Shreveport, La.—Amusement Park.—Gladstone Amusement Co. organized with \$25,000 capital stock; J. B. Atkins, president; J. W. Atkins, vice-president; B. Ross Jones, secretary and treasurer; will operate amusement park.

St. Louis, Mo.—Automobile Supplies, etc.—Marvin-Streck Oil & Supply Co. incorporated with \$5000 capital stock by E. S. Marvin, Thomas J. Streck and others.

St. Louis, Mo.—Garage.—Albert Sterne Motor Car Co. will erect garage to cost \$10,000.

St. Marys, W. Va.—Contracting.—The Ohio Valley Contractors incorporated with \$5000 capital stock by O. C. Sweeny, C. A. Covell, both of St. Marys; J. C. Parsons, Pittsburg, Pa., and others.

Tampa, Fla.—Land Improvement.—Tuell Realty Co. incorporated with \$5000 capital stock; Joaquin Lopez, president, secretary and treasurer; Celestino Lopez, vice-president.

Waco, Texas.—Elevator.—H. H. Crouch Grain Co. will rebuild grain elevator and warehouse recently reported damaged by fire; ordinary construction; concrete and brick; further plans not made.

Washington, N. C.—Steam Laundry.—Alderman-Capehart Laundry Co. incorporated with \$10,000 capital stock by J. C. Capehart, W. L. Vaughan, both of Washington, and W. H. Alderman, Wilmington, N. C.

Waycross, Ga.—Pecan Cultivation.—American Pecan Co. incorporated with \$100,000 capital stock; Irving G. Herman, 6 East Lexington St., Baltimore, Md., president; to plant and cultivate pecans.

Wheeling, W. Va.—Engineering.—Central Engineering & Specialty Co. incorporated with \$5000 capital stock by H. E. Hohman, Roy Poffenberger, George E. Carle and others.

### MISCELLANEOUS MANUFACTURING PLANTS

Alexandria, Va.—Drugs.—Ebbitt Drug Co. incorporated with \$6000 capital stock; C. O. Rice, 2217 Q St. N. W., president; R. S.



Bowie, The Sheridan, vice-president; H. H. O'Beir, 818 Colorado Bldg., secretary and treasurer, all of Washington, D. C.

Atlanta, Ga.—Publishing.—Southeastern Publishing Co. incorporated with \$25,000 capital stock by J. F. Westbrook and E. D. Thomas.

Baltimore, Md.—Bakery.—Henry Hahn, 2301 East Oliver St., awarded contract to John Muller, 1600 North Milton Ave., Baltimore, for erection of bakery and store building, 22x36 feet, and two residences, 18x50 feet, on Oliver street; two stories; brick; cost \$5000.

Baltimore, Md.—Steel Wheelbarrows.—Ohio Steel Wheelbarrow Co., Toledo, Ohio, contemplates building plant in South and is considering Baltimore as location; when city is selected probably buildings will be of concrete construction; product to be steel wheelbarrows, wheels, trays, etc.

Baltimore, Md.—Brewery.—Gustav A. Bachman, 228 O'Donnell St. ext., has purchased and will operate plant of Mt. Vernon Brewing Co., at foot of Ridgely street, consisting of brewery with capacity of 40,000 barrels annually, ice plant, storage warehouse, stables and several smaller buildings; name will be changed to Consumers' Brewing Co.

Baltimore, Md.—Lime Converting.—American Cyanamid Co., Isaac W. Read, secretary, 100 Broadway, New York, expects to locate plant for converting free lime out of cyanamid into sulphate of lime; will probably invest about \$30,000 and may enlarge later.

Baltimore, Md.—Buttons.—Alma Manufacturing Co., 611 to 639 South Monroe St., has had plans prepared by and awarded contract to McLaughlin Bros., 915 Bolton St., Baltimore, for alteration and addition to plant; additional story will be added to present building; new structure to be two stories; 62x76 feet; cost of improvements, \$15,000. (Recently mentioned.)

Baton Rouge, La.—Oil Refinery.—Standard Oil Co. of Louisiana incorporated with \$5,000,000 capital stock; F. W. Weller, New York, president; P. S. Norris, vice-president; R. C. Bembs, secretary and treasurer; both of New Orleans, La.; Charles T. White, assistant secretary; W. P. Howe, assistant treasurer; both of New York; will erect oil refinery reported to cost \$2,000,000; will build pipe line from Louisiana field and transport from Texas in boats; understood to be subsidiary to Standard Oil Co., 26 Broadway, New York, which telephones the Manufacturers Record no details can be stated now.

Birmingham, Ala.—Iron Beds, Steel Office Fixtures, etc.—Birmingham Sanitary Bed & Manufacturing Co., Box 323, recently noted organized, will erect plant to manufacture sanitary couches, metallic beds, office fixtures, etc.; will at present erect \$1200 building, 30x80 feet, one story, with iron sides and frame roof; will later build three additional similar structures; machinery purchased; John W. S. Jones, president and treasurer; Wilson P. Jones, secretary.

Charleston, W. Va.—Glass.—Imperial Window Glass Co. incorporated with \$250,000 capital stock by George E. Prince, J. Edmond Price, Edmond C. Harris and others.

Dallas, N. C.—Wood-fiber Plaster.—R. O. Fordham contemplates establishment of plant for manufacture of wood-fiber plaster. (See "Machinery Wanted.")

Dallas, Texas.—Automobiles.—Company will be incorporated with \$125,000 capital stock by W. L. B. Hawes, W. O. Brown, E. M. Turner and others, to establish automobile factory.

El Reno, Okla.—Granite Plant.—Apache Granite Co., Apache, Okla., will establish granite plant at El Reno.

Gastonia, N. C.—Stalk Choppers.—R. A. Matthews, Clover, S. C., is promoting organization of company with \$10,000 capital stock to establish plant in Gastonia for manufacture patented stalk chopper.

Greenville, S. C.—Cotton Grader.—R. H. Smith and L. A. Greene are organizing company to manufacture patented cotton grader invented by Mr. Greene; are considering Greenville, Atlanta, Athens and Gainesville, Ga., as location of plant.

Houston, Texas.—Paint and Sheet Metal.—W. H. Rogers Company, recently reported incorporated with \$40,000 capital stock, will manufacture paints and sheet metal for Texas trade; is connected with Birmingham Paint & Roofing Co. and Rogers Paint Co., both of Birmingham, Ala.; W. H. Rogers, president; W. C. Munn, vice-president; W. D. Rogers, manager; will erect brick and iron structure 60x1000 feet; cost not estimated; machinery costing \$22,000 practically purchased.

Houston, Texas.—Drugs.—C. L. Drug Co. incorporated with \$30,000 capital stock by

W. Hampton Caldwell, W. D. Schillinger and E. C. Robertson.

Houston, Texas.—Headlights.—Anderson-Lacey Headlight Co. will establish plant in Houston for manufacturing patented headlights.

Houston, Texas.—Shipyard.—Galveston, Harrisburg & Houston Transportation Co. reported to be interested in establishment of shipyard in Houston; slip will be dredged into bank of channel, and water-front, including frontage on sides of slip, will be converted into wharfage; heavy set of marine ways, tool shops, boat sheds and other equipment will be installed.

Houston, Texas.—Paint and Glass.—South Texas Paint & Glass Co. incorporated with \$16,000 capital stock by O. H. Brown, E. Milroy and E. L. Dennis.

Jackson, Miss.—Creamery.—Brown Creamery Co. awarded contract to Morris & Co., New Orleans, La., and Dallas, Texas, for erection of creamery to cost \$22,000, also for installation of 15-ton ice plant; construction has begun.

Jacksonville, Fla.—Propeller.—S. C. Littlefield, Jr., contemplates manufacture of patent propeller. (See "Machinery Wanted.")

Kansas City, Mo.—Furniture and Carpets.—Robert Keith Furniture & Carpet Co. has purchased for \$16,000 site 66x160 feet and will erect factory building, repair shop and warehouse.

Kenova, W. Va.—Chemicals.—Company of which A. D. Hughes, Pittsburg, Pa., is general manager has decided on Kenova as location for chemical plant.

Lonohe, Ark.—Rice Mill.—Charles McKee, J. D. Arnold and Roy Martin, all of Little Rock, Ark., will establish rice mill at Lonohe.

Lonsdale, R. Station, Knoxville, Tenn.—Baskets.—Knoxville Basket Co. will rebuild plant reported burned; loss \$20,000.

Louisville, Ky.—Driers and Filter Presses.—Biles Drier Co. reincorporated and consolidated with J. B. Devine Company, Buffalo, N. Y.; will continue manufacture of rotary steam and direct heat driers and filter presses; main office, 428 Brishane Building, Buffalo; J. N. Biles, manager of Louisville plant.

Macon, Ga.—Paper, etc.—Okra Products Co., 468 Walnut St., is name of company noted in February as being organized by John T. Moore, T. N. Baker and W. D. Lamar to establish plant for manufacturing paper, etc., from okra; organization not completed; large acreage of okra is being planted and machinery details are under consideration; site for mill, capacity, etc., to be decided soon.

Mannington, W. Va.—Glass.—Mannington Glass Works Co. reported to rebuild plant reported burned; loss \$50,000.

New Braunfels, Texas.—Horse Collars.—Gus Tolle and Alford Tolle are promoting establishment of \$30,000 collar factory; capacity 15 to 18 dozen collars daily.

New Orleans, La.—Banners, Flags, etc.—George Roudillon Company incorporated with \$15,000 capital stock; George Roudillon, president and manager; Leon Martiny, vice-president; Herbert H. Reuff, secretary and treasurer.

New Orleans, La.—Bags.—Delta Bag Co. has purchased site at \$50,000 and will erect plant for manufacturing bags.

Norfolk, Va.—Patents.—Poe Invention Co. incorporated with \$35,000 capital stock; P. Robertson, president; C. G. Mulvey, vice-president.

Norfolk, Va.—Fertilizers and Chemicals.—Imperial Company, L. A. Young, president, will rebuild plant recently burned; loss \$150,000; plans and specifications not yet ready for announcement.

Oklahoma City, Okla.—Incinerators.—Conly Incinerator & Manufacturing Co. organized with \$100,000 capital stock by Joseph Conly and others; office, 210-212 North Robinson street.

Oklahoma City, Okla.—Tobacco.—Esra Offit is interested in establishment of tobacco factory in Oklahoma City by Kentucky firm.

Okmulgee, Okla.—Oil Refinery.—Okmulgee Refining Co. has increased capital stock from \$50,000 to \$75,000.

Owensboro, Ky.—Machinery.—W. L. Sloane, 714 Allen St., will manufacture two small patented machines, one of aluminum and one of cast-iron and steel; will contract for manufacture; character of machines not announced, but models and drawings are ready. (See "Machinery Wanted.")

Plaucherville, La.—Sugar Mill.—L. M. Rabalous will establish steam sugar mill with capacity of 500 gallons daily; cost \$1200.

Portsmouth, Va.—Bakery.—S. Spigel in-

corporated with \$15,000 capital stock; Simon Spigel, president; Louis Spigel, secretary and treasurer; will establish bakery of 500 loaves daily capacity. (See "Machinery Wanted.")

Pulaski, Va.—Hardware.—Price Hardware Co. incorporated with \$50,000 capital stock; W. H. Trelinger, president; A. V. Hancock, vice-president; W. C. Price, secretary-treasurer.

San Antonio, Texas.—Macaroni.—Angelo Battaglia and others, recently noted to establish macaroni factory, have leased building and purchased machinery; Mr. Battaglia, Box 718, president and general manager.

Sapulpa, Okla.—Glass.—J. F. Adamson, Parker City, Ind., will, it is reported, establish glass factory in Sapulpa.

Shreveport, La.—Window Glass.—Chanute Window Glass Co., Chanute, Kans., contemplating establishment of plant in Shreveport to manufacture window glass.

St. Louis, Mo.—Clothing.—Red Diamond Clothing Co. has increased capital stock from \$50,000 to \$100,000.

St. Louis, Mo.—Bakery.—Independent Bakery Co. incorporated with \$7500 capital stock by Frederick Sautter, Theodore Kicker and Charles E. Sommers.

St. Louis, Mo.—Clothing.—Meyer, Strauss & Raub incorporated with \$32,500 capital stock by Alexander S. Meyer, Carl Strauss and others.

St. Louis, Mo.—Plumbing and Heating.—West End Plumbing & Heating Co. incorporated with \$3000 capital stock by Joe Williams, Louis Cahn and Walter A. Kenley.

St. Louis, Mo.—Window Screens.—C. G. W. Manufacturing Co. incorporated by Thomas Lewis, C. G. Woods and Edward R. Golden.

St. Louis, Mo.—Ladies' Neckwear.—H. Seligman Novelty Co. incorporated with \$40,000 capital stock by Harry Seligman, Lizale Seligman and Frank W. Eastin.

Sumter, S. C.—Telephones.—Sumter Telephone Manufacturing Co. will erect addition to plant; brick; 260x50 feet.

Texas City, Miss.—Oil Refinery, etc.—The Texas Company, main offices at Houston, Texas, is understood to have completed the purchase, at \$750,000, of the Texas City Refinery Co.'s refinery, now nearing completion; is reported as progressing with establishment of distributing depots in the Southwest, the expenditure to approximate \$4,000,000.

Tulsa, Okla.—Glass.—Tulsa Glass Co. will establish plant to manufacture tumblers, lamp globes, etc.; cost \$35,000.

Tulsa, Okla.—Bakery.—George Schmidt will erect bakery; 50x80 feet; two stories; cost \$6200.

Weatherford, Texas.—Ice-cream and Creamery.—E. I. Arnold will establish ice-cream factory and creamery; initial capacity 100 gallons cream and 200 pounds of butter.

Weatherford, Texas.—Creamery and Ice-cream.—Barber & Sanders, Cleburne, Texas, will, it is reported, establish creamery and ice-cream factory at Weatherford.

Wheeling, W. Va.—Milk-modifying Apparatus.—J. W. Helzer & Co. organized with \$25,000 capital stock; G. C. Oliver, president; A. G. Hubbard, secretary; J. W. Helzer, sales manager; will manufacture Lactomode, an apparatus for modifying milk.

## RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fort Worth, Texas.—Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas, Texas, awarded contract to O'Rourke Construction Co. of Fort Worth for construction of roundhouse to replace burned structure; building to be fireproof, of reinforced concrete construction; 36 stalls. (Recently mentioned.)

Goldsboro, N. C.—Goldsboro Traction Co., E. T. Oliver, president, Raleigh, N. C., will erect repair shop in East Goldsboro.

Humboldt, Tenn.—Missouri, Tennessee & Georgia Railroad, I. H. Dungan, president, will erect repair shop.

Mobile, Ala.—Company is being organized. It is reported, to take over terminals of Mobile, Jackson & Kansas City Railroad, W. F. Owen, general manager, Mobile, and to construct new warehouses, piers, docks and other improvements, expending \$500,000.

Roanoke, Va.—Virginian Railway awarded contract to A. M. Walkup, Richmond, Va., for erection of 38 depots along line of railroad, including one at Roanoke.

Weston, W. Va.—George I. Keener contemplates construction of repair shop in Weston in connection with electric railway.

## ROAD AND STREET IMPROVEMENTS

Augusta, Ga.—City invites bids until May 11 for paving of streets that street and drains committee has authorized paved this year; proposals call for furnishing material, tools and labor and constructing complete 8300 square yards of vitrified-brick pavement on Broad street, 3750 square yards of Belgian-block or granite pavement on Reynolds street and 4250 square yards of Belgian-block or granite pavement on 13th street; 1700 linear feet of granite curb to be set on above work; bids will be accepted on any or all of items; Nisbet Wingfield, City Engineer. (See "Machinery Wanted.")

Austin, Texas.—Travis County Commissioners are arranging to begin work on proposed road improvements, for which \$100,000 of bonds have been voted; bids for construction of one mile of road from Montopolis Bridge to Austin opened April 19. Commissioners will soon advertise for proposals on construction of five miles of road. R. E. White, County Judge.

Baltimore, Md.—Board of Awards awarded following contracts for paving of 17 streets, four in Annex and balance in old city limits: Warren Bros. Company of Boston, Mass., James E. Trott, local representative, 411 American Bldg.—12th street, \$11,976; Valley street, \$1924.60; Polk street, \$1924.60; all to be bitulithic on bituminous base. F. E. Schneider & Co., 332 Law Bldg.—14th street, sheet asphalt, \$4543.40. F. E. Schneider & Co., 332 Law Bldg.—Ann street, \$5430.15; Chester street, \$13,550.45; Ensor street, \$2224.41; Eager street, \$7878.59; Lanevale street, \$3329; Oliver street, \$5796.85; Payson street, \$5102.26; Valley street, \$9263.24; Wilson street, \$3090.80; all to be sheet asphalt. Warren Bros. Company (address given above)—Clement street, \$5066.68; William street, \$5784.43; both with bitulithic Patrick Reddington's Sons, 321 St. Paul St.—Callender alley, \$1293.60; O'Donnell street, \$10,931.18; both with vitrified bricks.

Bessemer, Ala.—City will construct 3910 yards and 11,927 yards of street paving, for which separate bids will be opened May 4. Proposals are to be on brick, wood block, granite or bitulithic. Phil Lacey, City Engineer. (See "Machinery Wanted.")

Brownsville, Tenn.—City contemplates voting on issuance of \$30,000 of bonds for graveling streets additional to \$30,000 already issued. Address The Mayor.

Canadian, Texas.—Hemphill county voted \$10,000 of bonds for road construction. Address County Commissioners.

Canton, Station Baltimore, Md.—Canton Company, W. B. Brooks, president, will grade, curb and pave Canton street, from Eastern avenue to Lombard street, with sheet asphalt, asphalt blocks, bitulithic or vitrified paving blocks; bids to be opened April 23. (See "Machinery Wanted.")

Carthage, N. C.—McNeill's township voted \$15,000 of road bonds recently mentioned; Arthur S. Newcomb, acting Mayor, Southern Pines. (Southern Pines within township limits.)

Clinton, Ky.—City will construct two miles of paved streets; bids to be opened April 30. Address D. Johnson. (See "Machinery, etc., Wanted.")

Comanche, Okla.—Bids will be opened April 26 for constructing four miles of public highway, to include grade, cuts, fills, etc. Address J. S. Leftwich, secretary. (See "Machinery Wanted.")

Decatur, Ala.—Morgan county awarded contract to Crinkley & Goodrich, Harriman, Tenn., for construction of 27½ miles of roads.

Dublin, Ga.—City awarded contract to Georgia Hydraulic Stone Works of Dublin at \$610.25 to construct 4300 square yards new cement sidewalk and to rebuild 4200 square yards of old cement sidewalk; W. S. Phillips, Mayor; H. S. Jaudon, Box 582, Savannah, Ga., is engineer. (Recently mentioned.)

Elizabethton, Tenn.—City is considering bond issue of \$50,000 for sewer construction and street improvements. Address The Mayor.

Front Royal, Va.—Warren county contemplates voting on issuance of \$30,000 of bonds for road construction. Address County Commissioners.

Galveston, Texas.—Galveston county invites bids until April 26 for continuing boulevard paving easterly for distance of six blocks. This will include extension of sidewalk, curb and seawall railing; paving to be vitrified brick; expenditure \$35,000; John M. Murch, County Auditor. (See "Machinery Wanted.")

Goldsboro, N. C.—City will vote June 14 on issuance of \$150,000 of bonds for street and sidewalk paving. Address The Mayor.

Hondo, Texas.—Medina county voted \$40,000 road and bridge bonds. Address County Commissioners.

Jennings, La.—Ward 10, Calcasieu parish, voted to improve roads. Address County Commissioners, Lake Charles, La.

Kenova, W. Va.—City Council contemplates paying improvements, and awarded contract to a Charleston (W. Va.) engineering company for surveying streets. This has been undertaken by R. L. Mullen and J. J. Cavendish of the firm, which will now prepare drawings and estimates. After these have been submitted city authorities will call bond election.

Lafayette, Ga.—Walker county will vote in August on issuance of \$100,000 of bonds for road improvements. Address County Commissioners.

Little Rock, Ark.—Huber & Murphy of Little Rock have contract at nine and three-quarters cents per square foot for constructing 40,000 square feet of sidewalk in Charles S. Stiff Addition, and Merchants' Transfer Co. of Little Rock for grading 6000 linear feet of street.

Lynchburg, Va.—City opened bids April 19 for following street work: 300 cubic yards excavation, 900 square yards granite-block pavement, 500 linear feet stone curb to be set, 350 square yards granolithic sidewalk, 625 square yards rubblestone to be removed, 500 linear feet stone curb to be removed. H. L. Shaner, City Engineer.

Lynchburg, Va.—City will construct 1550 square yards granolithic sidewalks; 600 cubic yards excavation; bids to be opened April 26; H. L. Shaner, City Engineer. (See "Machinery Wanted.")

McAlester, Okla.—City will construct 31,319.3 square yards of vitrified-block pavement, 11,538 linear feet of combined curb and gutter, 1284 linear feet of 12-inch curbing, 11,181 cubic yards of excavation; bids opened April 19; J. M. Gannaway, City Clerk.

Mobile, Ala.—City will pave certain streets with 94,000 square yards of creosoted wooden blocks, including grading, etc., and construct 60,000 linear feet of cement curbing, including grading, etc.; bids to be opened May 12; \$320,000 are available; Wright Smith, chief engineer; J. T. Schley, president Board of Public Works. (Recently mentioned. See "Machinery Wanted.")

Norfolk, Va.—Sands & Key of Norfolk have contract for laying granolithic sidewalk in Port Norfolk and Pinnars Point; also reported that macadam street will be constructed on Carolina and Hill avenues from New York, Philadelphia & Norfolk Railroad terminal, which divides Port Norfolk from Pinnars Point.

Park Station Knoxville, Tenn.—Street Committee, W. H. Underwood, chairman, will probably soon award contracts for macadamizing streets; \$62,500 of bonds have been voted, of which \$50,000 will be expended in macadamizing and remainder in grading, filling, guttering and curbing. (Previously mentioned.)

Pensacola, Fla.—Board of Public Works appropriated \$3800 for building hard road of clay and cinders on Davis street; Charles Merritt of Pensacola submitted bid at above figure.

Richmond, Va.—Bids will be opened May 4 for construction of macadam roads in Botsourt and Rockbridge counties and on May 1 for construction of nine miles of gravel road in Hanover county; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Rockwood, Tenn.—City will vote May 15 on issuance of \$28,000 of bonds for street paving, etc. Address The Mayor. (Recently mentioned.)

San Marcos, Texas.—City voted \$5000 street improvement bonds. Address The Mayor.

Savannah, Ga.—P. D. Daffin, chairman Park and Tree Commission, has petitioned Mayor Tiedeman and Board of Aldermen for \$26,437 for improvements at Bonaventure cemetery; these will include construction of 23,493 square yards of gravel roadway, to cost \$3990; ellipse connecting Christian and Hebrew cemeteries, \$11,347, and 7000 yards of concrete sidewalks, \$7600. John W. Howard, City Engineer, has prepared map showing proposed betterments.

Seranton, Miss.—City Council passed resolution authorizing issuance of \$40,000 of bonds for street improvements. Address The Mayor.

Shreveport, La.—Police Jury, Caddo parish, Jules Dreyfuss, president, 222 Milam St., contemplates building at early date proposed road between Shreveport and Mansfield; State to assist in construction; is considering building 100 miles of road in parish within next two years; required money available.

Stamford, Texas.—City awarded contract to Ockander Bros., Waco, Texas, for construction of vitrified brick paving on 12 blocks; W. C. Blanchett, Mayor. (Twenty-thousand-dollar bond issue recently mentioned.)

Tampa, Fla.—Hillsborough county will grade and surface road from Tarpon Springs to Dunedin; bids to be opened May 3. Address County Commissioners. (See "Machinery Wanted.")

Texarkana, Texas.—City awarded contract to Houston (Texas) engineering company for engineering work in connection with construction of streets and roads in Texarkana and Commissioners' Precinct No. 1, as provided for in recent bond issue of \$250,000. (Lately noted.)

Valdosta, Ga.—City has voted \$20,000 of bonds for construction of 15 miles of cement sidewalks. Address The Mayor.

Washington, D. C.—Engineer department will expend about \$278,000 in construction of new county roads and repaving old ones; L. R. Gravill, superintendent of county roads; William V. Judson, Commissioner, D. C.

Washington, D. C.—Peters & Dykes, Knoxville, Tenn., have contract for concrete paving at National Cemetery, Washington.

Waurika, Okla.—City will lay 25 miles of concrete sidewalks and contemplates five miles of brick paving. Address The Mayor.

Wichita Falls, Texas.—City will vote May 18 on issuance of \$17,500 of bonds for street paving. Address The Mayor.

Yanceyville, N. C.—It is proposed to organize Caswell County Macadam Road Co. with \$25,000 capital stock to construct road from Yanceyville to Virginia State line, distance of 13 miles; following recommended as officers: President, B. S. Graves of Yanceyville; vice-president, John P. Swanson, Danville, Va.

## SEWER CONSTRUCTION

Atlanta, Ga.—City has contracted with Rudolph Herring, engineer, of New York for plans for sewer system; \$700,000 of bonds have been issued. R. M. Clayton, City Engineer. (Recently mentioned.)

Baltimore, Md.—Ryan & Reilly, 215 American Bldg., Baltimore, are lowest bidders at \$50,776.25 on construction of sanitary sewers, contract No. 28, and James Ferry & Sons, Crafton, Ind. Sta. Pittsburg, Pa., are lowest bidders at \$42,783.05 for sanitary contract No. 39. Contract No. 28 will require 16,200 linear feet 6-inch house connections, 23,500 linear feet 8-inch pipe sewer and 2300 linear feet 10 to 15-inch pipe sewer; contract No. 39, 13,500 linear feet 6-inch house connections, 19,600 linear feet 8-inch pipe sewer and 4200 linear feet 10 to 20-inch pipe sewer. Calvin W. Hendrick, chief engineer Sewerage Commission, American Bldg.; main offices of Ryan & Reilly, 26 S. 15th St., Philadelphia, Pa. (Recently mentioned.)

Elizabethton, Tenn.—City is considering \$50,000 bond issue for sewer construction and street improvements. Address The Mayor.

Florence, S. C.—City will vote May 6 on issuance of \$65,000 of bonds for sewer construction. Address The Mayor.

Greenville, N. C.—Eastern Carolina Teachers' Training School awarded contract to J. H. Johnson, Raleigh, N. C., for construction of 2,000 feet of sewer; contract for underdrainage deferred for present; Dresbach & Clark, Greenville are engineers. (Recently mentioned.)

Houston, Texas.—City Commissioners have approved plans by F. L. Dormant of Houston for construction of storm sewer on Austin street, to be paid out of \$700,000 bond issue recently mentioned; bids will soon be invited; H. B. Rice, Mayor.

Jacksonville, Fla.—Board of Bond Trustees, R. H. Barnett, chairman, adopted report of special committee recommending that contract for laying certain sewers and drains named in budget for paving and repairs be awarded Bryan & Co. of Jacksonville.

Lawrenceville, Va.—City will open bids June 1 for sale of water-works and sewerage system franchise. Address City Clerk. (See "Machinery Wanted.")

Lexington, Ky.—Thomas Ahern & Co. of Lexington are lowest bidders for construction of sewer on Grosvenor avenue.

Marietta, Ga.—City has been authorized to proceed with issuance of \$30,000 of bonds for construction of sewer system. Address The Mayor. (Previously mentioned.)

McAlester, Okla.—City awarded contracts to Horton & Horton, Houston, Texas, for construction of sewer system, as follows: Sanitary sewer, \$48,910.05; storm-water sewer, \$19,890.27, and Sandy Creek improvement, \$31,965.27. J. M. Gannaway, City Clerk.

Mobile, Ala.—City will open bids May 12

for construction of 33,000 linear feet of pipe sewers 10 to 30 inches in diameter; 33,000 linear feet of 6-inch house connections, with manholes, catch basins, inlets and other appurtenances; Wright Smith, chief engineer; J. T. Schley, president Board of Public Works; \$320,000 of bonds are available. (See "Machinery Wanted.")

Norfolk, Va.—Local Board of Seventh Ward and Board of Control awarded contract to Guild & Co., Chattanooga, Tenn., at \$37,500 for construction of sewerage system in Colonial Place.

Raleigh, N. C.—State Hospital Commission will open bids April 26 for 5650 feet 6 and 8-inch sewer with house connections to 11 buildings at State Hospital for Insane, Raleigh; W. A. Erwin, chairman building committee, West Durham, N. C. (See "Machinery Wanted.")

San Antonio, Texas.—Beacon Hill District will probably issue about \$5000 of bonds for construction of sewer system, for proposed improvement district No. 14; A. C. Pancoast, assistant city engineer, has completed estimate of property valuation.

South Jacksonville, Fla.—City has held second election and voted to issue \$50,000 of bonds for sewer system and water-works lately mentioned. Address The Mayor. (Bond issue recently defeated.)

Valdosta, Ga.—City voted issuance of \$5000 of bonds for extending sanitary sewers. Address The Mayor. (Recently mentioned.)

Vernon, Texas.—City will construct sewer system to cost \$10,000; bids to be opened May 4; R. B. S. Herrell, City Secretary. (See "Machinery Wanted.")

Weatherford, Okla.—City has not fixed date for election on proposed \$20,000 bond issue for construction of sewer system recently noted; William Macintosh, Oklahoma City, Okla., engineer in charge; W. R. Cunningham, City Clerk.

Yukon, Okla.—City will vote on issuing bonds for sewerage system and water-works; J. F. Krouth, chairman of committee.

## TELEPHONE SYSTEMS

Auburn, Tenn.—Home Telephone Co. incorporated with \$3000 capital stock by B. R. McKnight, J. S. Odom, T. M. Bryan and others.

Copperas Cove, Texas.—Company organized with C. W. Clements president to operate rural telephone line.

Florence, Miss.—Telephone company organized with R. N. Whitfield, president and general manager; A. P. Dear, vice-president; Joseph J. Flowers, secretary and treasurer; will arrange for connections with Cumberland Telephone & Telegraph Co.

Livingston, Tenn.—Livingston Branch of Home Telephone system incorporated with W. A. Ormsby president, J. S. Masters and G. W. Carmack vice-presidents, M. H. Wells manager, J. H. Ward treasurer, W. D. Fiske secretary.

Montgomery, Ala.—Montgomery & Crenshaw County Telephone Co. incorporated to construct telephone lines in Montgomery and Crenshaw counties.

Port Arthur, Texas.—Independent Telephone Co. will, it is reported, expend \$10,000 for improvements to service, including installation of new telephone instruments throughout city.

Washington, La.—Washington Telephone Co., recently noted incorporated to operate established telephone system and to expend \$5000 for improvements, will erect exchange building; construction has begun.

## TEXTILE MILLS

Americus, Ga.—Yarns.—Board of Trade is promoting movement to form company for erection of 20,000-spindle cotton-yarn mill.

Buena Vista, Va.—Silk.—Emanuel Gerli of New York has, it is reported, purchased Buena Vista Woolen Mills and will convert into silk mill.

Chester, S. C.—Yarns and Sheetings.—Eureka Cotton Mills will install 10,000 spindles and 450 looms in addition lately reported contracted for; will operate by electricity; product, fine sheetings and coarse yarns; O. A. Robbins, Charlotte, N. C., is engineer in charge, and all machinery contracts have been awarded.

Columbus, Ga.—Yarns.—Perkins Hosiery Mills, lately noted as to enlarge, will erect two-story 84x210-foot addition and install 5000 to 8000 spindles, 24 cards and accompanying machinery, operated by 250 to 400 electrical horse-power; will manufacture white and colored yarns for knitting trade; present equipment is 5000 spindles, 275 knitting machines, etc.; contract to construct addition awarded to John H. Lowe, Atlanta, Ga.

Columbus, Miss.—Tombigbee Cotton Mills, Columbus Underwear Mills and Columbus Comfort Factory will, it is reported, combine and build electric plant to operate the three mills.

Fort Worth, Texas.—Artificial Silk, etc.—The Factory Club has correspondence from F. Wiedmann of Marine View, Hove, Sussex, England, relative to organization of company to establish plant for manufacturing artificial silk and horsehair from cotton waste.

Granite Falls, N. C.—Yarns.—Dudley Shoals Cotton Mill Co. has increased capital stock from \$100,000 to \$200,000; now has 5000 ring spindles.

Greenwood, S. C.—Print Cloth.—Greenwood Cotton Mill has begun installation of 9000 spindles additional to 7000 spindles in No. 1 mill; all contracts awarded; No. 2 mill has 14,000 spindles, and addition reported will increase company's total to 30,000 spindles, with 672 looms manufacturing wide print cloth; J. E. Shirline, Greenville, S. C., engineer in charge of installation.

High Point, N. C.—Hosiery.—J. H. Tate is interested in plan to establish hosiery knitting mill. (See "Machinery Wanted.")

Jacksonville, Fla.—Ball Ground Cotton Mills, Ball Ground, Ga., reported as proposing to build mill at Jacksonville.

Lafayette, Ga.—Hosiery.—Walker County Hosiery Mills will add 85 knitting machines in connection with improvements reported lately; machines ordered from Mayo Knitting Machine & Needle Co., Franklin, N. H.

Lagrange, Ga.—Unity Cotton Mills, Fuller S. Callaway, treasurer, awarded contracts for power plant as follows: Hoover-Owens-Rentschler Co., Hamilton, Ohio, engines of about 800 horse-power; Harrisburg Foundry & Machine Co., Harrisburg, Pa., high-speed electric engines; General Electric Co., Schenectady, N. Y., generators and dynamos; Dean Bros. Steam Pump Works, Indianapolis, Ind., pumping and condensing machinery; R. D. Cole Manufacturing Co., Newnan, Ga., boilers, tanks, towers, etc. This is for additional mill of 10,000 spindles, etc.; other details previously reported.

Macon, Ga.—Hosiery.—J. C. Moody of Brunswick, Ga., will establish hosiery knitting mill at Macon; capitalization to be \$14,000.

Manchester, Ga.—Cloth.—Manchester Cotton Mills, Fuller E. Callaway of Lagrange, Ga., president, awarded contracts for power plant as follows: Hoover-Owens-Rentschler Co., Hamilton, Ohio, engines of about 1000 horse-power; Harrisburg Foundry & Machine Co., Harrisburg, Pa., high-speed electric engines; General Electric Co., Schenectady, N. Y., generators and dynamos; Dean Bros. Steam Pump Works, Indianapolis, Ind., pumping and condensing machinery; R. D. Cole Manufacturing Co., Newnan, Ga., boilers, tanks, towers, etc. Other details previously stated; plant to have 20,000 spindles, 500 looms, etc.

Marietta, S. C.—Z. T. McKinney and R. L. Walker of Greenville, S. C., and W. H. Patterson, Candler Bldg., Atlanta, Ga., are reported as forming company to build cotton mill at Marietta.

Marion, S. C.—Sheeting.—Marion Manufacturing Co., lately reported incorporated, is understood to plan construction of mill to have 12,500 ring spindles and 300 looms for manufacturing brown sheetings; D. D. Little of Spartanburg, S. C., to be president and treasurer.

Meridian, Miss.—Hosiery.—The Priscilla Mills incorporated with capital stock of \$30,000 by A. W. McLellan, Wm. H. McLellan and Charles McLellan of New Orleans; contracts awarded for buildings, 100 knitting machines, electrical-power equipment, etc.; this is branch of Alden Knitting Mill, New Orleans, detailed recently.

Mt. Pleasant, N. C.—Hosiery.—C. F. & A. N. James will establish James Knitting Mill; have purchased building material, but not machinery; will install 25 knitting machines and steam-power equipment. (See "Machinery Wanted.")

Roanoke, Va.—Cotton Yarns.—Roanoke Mills Manufacturing Corporation, recently reported incorporated, will acquire Roanoke Cotton Mill Co. property; this comprises mill buildings, 250-horse-power engine, two electric motors of 30 and 40 horse-power, 4000 spindles, etc., for daily production of 4000 pounds of yarn; capitalization, common stock \$150,000, preferred stock \$25,000, first-mortgage bonds \$50,000; E. Lowndes Rhett, president; Abbott B. Rhett, treasurer; both of New York; temporary offices of corporation, Room 735, 15 William St.

Tarboro, N. C.—Hosiery.—Wilson & Dawson Hosiery Co. contemplates adding 25 knitting machines and building and equip-



ping dye plant; now has 77 knitting machines, etc.

### WATER-WORKS

Alva, Okla.—City has voted \$10,000 of bonds for reservoir and extension of water service. A. N. Devin, City Clerk. (Recently mentioned.)

Augusta, Ga.—City awarded contract to J. H. McKenzie Sons of Augusta for erection of auxiliary steam pumping station upon 10 per cent. commission basis; style of building has been changed so as to provide for present needs only; Nisbet Wingfield, Commissioner of Public Works. (Recently mentioned.)

Augusta, Ga.—Water-works Committee awarded contract to Hallahan & Costello of Augusta for laying water mains during 1909; estimated expenditure, \$10,000. (Recently mentioned.)

Florence, S. C.—City will vote May 6 on issuance of \$15,000 of bonds for extension of water mains, etc. Address The Mayor.

Gage, Okla.—City will vote on issuance of \$30,000 water-works bonds. Address The Mayor.

Hubbard, Texas.—City awarded contract to G. T. Blackford, Knoxville, Tenn., at \$499,550 for construction of proposed water-works and electric-light plant; work will include construction of concrete reservoir with capacity of 600,000 gallons, concrete powerhouse, water mains, etc.; five towns are to be supplied with water and light; W. H. Bass prepared plans.

Hugo, Okla.—City will open bids May 4 for machinery, material and labor necessary to complete system of water-works; Hiram Phillips, 645 Frisco Bldg., St. Louis, Mo., is engineer; R. L. Jones, Mayor. (See "Machinery Wanted.")

Jacksonville, Fla.—Board of Bond Trustees, B. H. Barnett, chairman, adopted report of special committee recommending that contract for pumping plant for fire protection be awarded Allen-Chalmers Company, Milwaukee, Wis., at \$10,678; equipment consists of two 10-inch-diameter single-suction horizontal-shaft four-stage 2500-gallon centrifugal pumps, each directly connected to 375-horse-power 60-cycle three-phase 2200-volt constant-speed induction motor.

Jeau, Ga.—City has contracted with H. S. Jaudon, consulting engineer of city water-works, Savannah, Ga., to prepare plans and estimates for water-works.

Kereus, Texas.—City is considering construction of water-works. Address The Mayor.

Knoxville, Tenn.—Special Water Committee, James H. Welcker, chairman, is considering additional bond issue of \$500,000 for constructing water-works or purchasing plant of Knoxville Water Co.; this, added to \$750,000 recently mentioned as decided upon, will make total of \$1,250,000 available.

Lawrenceville, Va.—City will open bids June 1 for sale of water-works and sewerage system franchise. Address City Clerk. (See "Machinery Wanted.")

Lexington, S. C.—W. P. Roof may be addressed for information concerning contemplated construction of water-works and electric-light plant recently mentioned.

Lexington, Tenn.—City is considering construction of water-works. Address The Mayor.

Macon, Ga.—Municipal Ownership Committee, J. E. Hall, chairman, appointed Charles A. Caldwell, Macon, Ga., and J. N. Hazlehurst, Atlanta, Ga., as engineers to prepare plans for municipal water-works; city is considering purchase of plant of Macon Gas Light & Water Co., but if price is not satisfactory, probable city will construct municipal plant.

Marietta, Ga.—City has been authorized to proceed with issuance of \$80,000 of bonds for construction of water-works. Address The Mayor. (Previously mentioned.)

Mart, Texas.—City is arranging to soon begin construction of proposed water-works; water is to be secured from lake which is to have capacity of 55,000,000 gallons and be constructed on site of 76 acres about four miles from city; \$50,000 of bonds have been issued. (City recently mentioned to open bids for construction of earthen dam 700 feet long and containing 33,000 cubic yards of earth.) O'Neill Engineering Co., Wilson Bldg., Dallas, Texas, in charge; R. W. Bass, Mayor.

Milton, Fla.—City will vote on issuance of \$20,000 of bonds for construction of water-works; Solomon-Norcross Company, Candler Bldg., Atlanta, Ga., have been appointed engineers and are now making surveys and preparing plans and estimates.

Mission Ridge, P. O. Chattanooga, Tenn.—City has voted \$30,000 of bonds for construction

tion of water-works; J. H. Allison, R. P. Woodward and H. F. Holmes are Commissioners in charge. (Recently mentioned.)

Mount Calm, Texas.—Mount Calm Water & Light Co. organized with \$5000 capital stock and awarded contract to Bob Deering, Waxahatchie, Texas, for drilling well. J. H. Morgan is president; E. K. Herring, vice-president; W. G. Getton, secretary.

Ripley, Tenn.—Ripley Light, Water & Ice Co. will improve water plant. (See "Ice and Cold-Storage Plants.")

San Angelo, Texas.—San Angelo Water-Works Co. will expend \$25,000 in improvements to plant; will install 60-cycle generator and 750-horse-power engine.

Sapulpa, Okla.—City will vote on issuance of \$40,000 water-works and electric-light bonds.

South Jacksonville, Fla.—City has held second election and voted to issue \$50,000 of bonds for water-works and sewer system. Address The Mayor. (Bond issue was defeated in recent election, as stated.)

Stockdale, Texas.—Mitchell Mercantile Co. will install water-works system for business section of city.

Valdosta, Ga.—City has voted issuance of \$30,000 of bonds for enlarging reservoir at water-works, enlarging mains in business center, extending mains in new territory and enlarging so as to provide for equipment for electric lighting. Address The Mayor. (Recently mentioned.)

Vernon, Texas.—City will construct water-works to cost \$15,000; bids to be opened May 4; R. B. Sherrell, City Secretary. (See "Machinery Wanted.")

Waynesville, N. C.—City awarded contract to Guild & Co., Chattanooga, Tenn., at \$4,773.72, to lay five-mile gravity line of 8 and 10-inch cast-iron water pipe and construct intake for water-works; J. L. Ludlow, Winston-Salem, N. C., is consulting engineer; G. W. Mastin, chairman Water-works Committee. (Recently mentioned.)

Weston, W. Va.—Highland Distributing Co. incorporated with \$25,000 capital stock by W. W. Brannon, Lloyd Beeghley, Claude Rinehart and others.

Yukon, Okla.—City will vote on issuing bonds for water-works and sewerage system; J. F. Krouth, chairman of committee.

### WOODWORKING PLANTS

Ashdown, Ark.—Furniture.—Ashdown Lumber & Manufacturing Co. will establish furniture factory.

Ficklen, Ga.—Spokes, Handles, etc.—Ficklen Spoke & Handle Co. organized with L. M. Wells president and R. K. Carruth secretary and treasurer.

Green Sulphur Springs, W. Va.—Canes, Chairs, etc.—H. Gwinn and Judge Miller will establish plant for manufacturing hickory canes, chairs, golf clubs, etc.; gasoline power.

Lynchburg, Va.—Furniture.—National Manufacturing Co. incorporated with \$50,000 capital stock; C. F. Byrne, president, Washington, D. C.; Norah McNamara, vice-president; W. T. McNamara, treasurer, both of Lynchburg.

Morristown, Tenn.—Buggies.—O. R. Carver will be manager of company to establish factory for buggies.

Stanton, Tenn.—Heading.—F. H. Volterman will establish heading mill; construction has begun.

St. Louis, Mo.—Fruit Crates.—Christen Belows & Manufacturing Co. incorporated with \$50,000 capital stock by Frank Christen, St. Louis, and Joseph C. Christen, Ferguson, Mo.

Victoria, Texas.—Cabinet and Mill Work.—Victoria Cabinet & Mill Work Co. organized by Horace Wells, E. L. Moore and R. A. Peticoals; will erect planing mill 30x60 feet.

Waynesville, N. C.—Doors, Sashes, Tables, etc.—Harry Moody and Leon McKee will establish plant for manufacturing doors, sashes, etc.

### BUILDINGS COLLAPSED.

Petersburg, Va.—Chesterfield Hotel Annex, owned by John J. Hanrahan; J. O. James' store building; loss about \$75,000.

### BURNED

Asheville, N. C.—Kenilworth Inn, owned by M. Gazzam, Philadelphia, Pa.; loss \$140,000.

Bethpage, Tenn.—David Hunter's barn; loss \$1200.

Bowie, Texas.—Dudley Hotel; loss \$25,000.

Camden, Tenn.—Elmer Vick's sawmill; loss \$4500.

Charlotte, N. C.—C. A. Black's stable; building owned by R. L. and John Gibson; loss \$25,000.

Chase City, Va.—Mecklenburg Hotel; loss \$200,000.

Chattanooga, Tenn.—Thatcher Manufacturing Co.'s plant, loss \$3000; National Biscuit Co.'s plant, loss about \$3500.

Collierville, Tenn.—P. A. Perkins' residence; loss \$9000.

Cumberland, Md.—Mertens Sons' saw and lath mill.

Dalton, Ga.—D. C. Bryant's residence; loss \$8000.

Durant, Fla.—W. H. Freeman's sawmill.

Eldorado, Ark.—John P. Holmes' sawmill and planer; loss \$15,000.

Elkins, W. Va.—Hotel Gassaway; loss \$5000.

Fairmont, W. Va.—Eleven dwellings owned by Hammond Fire-brick Co.; loss \$30,000.

Hancock, Md.—J. T. Bridges' barn; loss \$5000.

Henderson, Texas.—Henderson Planing Mill Co.'s office building; loss \$3000.

Lawrenceburg, Ky.—A. C. Witherspoon's residence; loss \$8000.

Hubbard, Texas.—Hubbard City Mill & Elevator Co.'s plant; loss \$9000.

Leland, Miss.—Milton B. Smith's residence; loss \$10,000.

Little Rock, Ark.—St. Louis Compress No. 2, Wilbur F. Black, general superintendent; loss to plant \$100,000.

Lonsdale, R. Station, Knoxville, Tenn.—Knoxville Basket Co.'s plant; loss \$20,000.

Louisville, Ky.—Charles Yentsch's blacksmith shop; loss \$7000; H. A. Theobald & Son's planing mill and lumber yard; loss \$2500.

Mannington, W. Va.—Mannington Glass Works Co.'s plant; loss \$50,000.

McAlester, Okla.—Rock Island Coal Co.'s tipple of mine No. 8; loss \$10,000.

Meridian, Miss.—F. Betzbee's residence; loss \$6500.

Money Point, Norfolk, Va.—Imperial Fertilizer Co.'s plant; loss \$150,000.

Mine Run, Va.—J. R. Sullivan's saw and lath mills.

Nassawadox, Va.—Northampton Lumber Co.'s stable; loss \$30,000.

New Orleans, La.—Coliseum Skating Rink, owned by W. J. Morgan, W. S. Bender and others; loss \$39,000.

New Orleans, La.—Lawrence & Hamilton's feed mill damaged; loss \$12,000.

Roanoke, Va.—G. N. Ballou's residence; loss \$4000.

San Marcos, Texas.—Baptist Church; Rev. A. E. Copas' library; loss \$7000.

Tarry, Ark.—Matthews & Ezell stove mill but slightly damaged by recent fire. (Incorrectly reported.)

Taylor, Texas.—Ernest Groba's woodworking plant; loss \$900.

Terrell, Ark.—General Lumber Co.'s plants at Terrell and Hudspeth, Ark.

Warrenton, Ga.—Warrenton Clipper building not burned. (Recently incorrectly noted.)

### BUILDING NOTES

#### APARTMENT-HOUSES

Alexandria, Va.—Cameron Apartment-House Co., A. S. Doniphan, president, awarded contract to Joseph F. Rodgers of Alexandria for remodeling Peabody school building at King and Alfred streets as apartment-house; fireproof structure; 51x100 feet; hot-water heat; electric and gas lighting; cost \$30,000; plans by Milton Dana Morrill, Corcoran Bldg., Washington, D. C. (Recently mentioned.)

Baltimore, Md.—Albert Bonday awarded contract to B. W. & E. Minor, 224 West Pratt St., Baltimore, for alterations to building, converting same into apartment-house; hot-water heat; cost \$5000; plans by B. W. Minor.

Baltimore, Md.—Dr. A. Edwin Schmidt, 701 South Ann St., is promoting organization of company to erect apartment-house at Aliceanna and Ann streets; 60x32½ feet; to be built in form of hollow square; brick; ornamental cornices; contain 60 apartments of two, three and four rooms each; electricity and gas; cost \$35,000.

Baltimore, Md.—H. J. Jeffers, 6 East Lafayette Ave., is having plans prepared by Fredrick F. Beall, 213 St. Paul St., Baltimore, for apartment-house at St. Paul and Lanvale streets; three stories; 30x150 feet; concrete and brick; hot-water heating; electric lighting; cost \$15,000. (Recently mentioned.)

Berkley, Va.—A. Warren is having plans

prepared for apartment-house; two stories; brick; four apartments, two on each floor.

Chattanooga, Tenn.—H. S. Probasco, National Bank Bldg., Chattanooga, is having plans prepared by Chas. E. Bearden, Chamberlain Bldg., Chattanooga, for two-story brick mercantile and apartment building for colored people; contract for excavation let to C. Bathman, 645 Boyce St., Chattanooga; store on first floor; architect is receiving construction proposals.

Chattanooga, Tenn.—Julius Bukofzer, 615 East 4th St., will erect apartment-house recently mentioned; plans by Chas. E. Bearden, Chamberlain Bldg., Chattanooga; two apartments; two stories; brick; composition roof; hard pine interior finish; cement tile porches; cabinet mantels; hot-air heat; cost \$16,000.

Hagerstown, Md.—Charles M. Lam proposes to erect apartment-house; 11 apartments; storeroom ground floor.

Hagerstown, Md.—Francis W. Miller contemplates erecting apartment-house to cost \$40,000.

Johnson City, Tenn.—M. C. Curtis will erect by day's work the tenement buildings recently mentioned; plans by owner; two 55x60-foot structures; brick; stone trimmings; metal roof; two stories and basement; ordinary construction; steam heat; electric lighting; cost \$15,000.

Kansas City, Mo.—Waller & Holts Realty Co. awarded contract to Jacob Schweizer, Kansas City, for erection of apartment-house recently mentioned; six apartments; building 39½x47½ feet; mill construction; gas heating; gas and electric lighting; cost \$17,500; plans by Rudolph Margraf, Kansas City.

Kansas City, Mo.—George H. Kersting will erect two apartment buildings; each to be 40x54 feet; two stories; four apartments; estimated cost, \$14,000.

Montgomery, Ala.—Leopold Strauss has awarded contract for erection of proposed apartment-house; four stories; eight apartments; elevator; roof garden; cost \$40,000.

St. Louis, Mo.—J. Gould purchased site with frontage of 37 feet on which to erect five and six-room apartment-house to cost \$5000.

St. Louis, Mo.—Martin Monti purchased three sites for \$12,500 on which to erect apartment-houses.

St. Louis, Mo.—H. N. Walker has begun erection of proposed Yorkshire Apartment-House; three stories; brick front; contain six apartments, each to have porch, bath-rooms, dumbwaiter, etc.; plans by J. L. Wees of St. Louis.

St. Louis, Mo.—Louisa Young will have plans prepared by Baker & Knell, St. Louis, to prepare plans and specifications for two apartment-houses; each to be three stories; brick; contain six apartments of seven rooms each; total cost, \$75,000; Baker & Knell will supervise construction.

Tampa, Fla.—Isaac Maas has had plans prepared by A. H. Johnson of Tampa for apartment-house; four six-room-and-bath apartments; two stories; hot and cold water; device will be installed by which turning on of hot-water faucet in each of bathrooms automatically turns on gas heater under boiler in kitchens; electric and gas lighting; reception hall, 15x17 feet; 10-foot porch, with Ionic columns and ornate caps, in front.

Tulsa, Okla.—J. H. Evans awarded contract to Van Horn & Son for erection of apartment building recently mentioned; brick and stone construction; 72x56 feet; hot-water heat; gas and electric lighting; two dumbwaiters; cost \$25,000; plans by John V. Starr, Tulsa.

Wheeling, W. Va.—J. F. Paul awarded contract to W. E. Conner, Moundsville, W. Va., for erection of apartment-house; three stories and basement; 33x80 feet; five apartments; cost \$15,000; plans by H. F. Delinger, Elm Grove, W. Va.

#### BANK AND OFFICE BUILDINGS

Baltimore, Md.—Eutaw Savings Bank, William M. Hayden, Eutaw and Fayette Sts., awarded contract to J. Henry Miller, 106-108 Dover St., Baltimore, to erect addition to bank building; annex to have facade of brownstone, conforming to present building; one story high; frontage on Fayette street of 60 feet. Baldwin & Pennington, Professional Bldg., Baltimore, are preparing plans. (Previously mentioned.)

Brunswick, Md.—People's National Bank has had plans prepared by A. J. Klinkhart, Hagerstown, Md., for bank building recently mentioned; one story; 25x55 feet; pressed brick and cut-stone front; hot-water heating; electric lighting; cost \$7000; bids to be opened May 6.

Charlotte, N. C.—Commercial National Bank, R. A. Dunn, president, has not made detailed plans for office building recently noted to be erected on site purchased and now occupied by building. On expiration of lease structure will be erected.

Charlottesville, Va.—King Lumber Co. has begun erection of proposed office building. (See "Lumber-manufacturing Plants.")

Hazen, Ark.—Bank of Grand Prairie will erect two-story brick bank building; 50x90 feet; store on first floor; cost \$60,000; contract awarded to C. L. Proctor, Hazen.

Heber, Ark.—Cleburne County Bank will erect two-story brick building, 50x100 feet, corner Main and 2d streets; two storerooms on first floor; offices above; steam heat.

Houston, Texas.—S. F. Carter awarded contract to W. H. Young of Houston for excavation and retaining walls of 16-story office building; estimated that about 40 days will be required to complete this contract, by which time detailed plans will be completed and bids on construction can be invited. Sanguinett & Staats of Houston are architects. (Particulars of construction recently mentioned.)

Memphis, Texas.—Citizens' State Bank awarded contract for erection of two-story brick bank building.

Norfolk, Va.—Norfolk & Southern Railway awarded contract to West Richardson, 404 Seaboard Bank Bldg., Norfolk (recently noted as lowest bidder), for erection of fireproof office building and warehouse; steel construction; electric lighting; cost \$125,000; separate heating contract; plans by B. F. Mitchell, Norfolk. (See "Machinery Wanted.")

Oklahoma City, Okla.—State National Bank will erect 10-story bank and office building to cost \$400,000.

Ola, Ark.—Home Fire Insurance Co., A. L. George, secretary, McAlester, Okla., contemplates erecting office building in Ola.

Pine Bluff, Ark.—Citizens' Bank accepted plans by Desjardins & Shebley, Cincinnati, Ohio, and Mitchell Seligman, Louisville, Ky., for bank and office building; six stories; steel; cost \$175,000. (Recently mentioned.)

Port Lavaca, Texas.—State Bank & Trust Co. appointed committee consisting of C. T. Traylor, W. Berry and J. I. Cochran to secure plans and specifications for bank building and let contract for construction.

San Marcos, Texas.—First National Bank will erect three-story bank building.

Sinton, Texas.—Sinton State Bank awarded contract to W. F. Bowles, Corpus Christi, Texas, for erection of brick and stone bank building previously mentioned; plans by Alfred Gilles, San Antonio, Texas; fireproof structure; two stories; 25x60 feet; cost \$7,500.

Sour Lake, Texas.—Sour Lake State Bank awarded contract for erection of bank building; two stories; 60x90 feet; brick. (Mentioned in February.)

Tampa, Fla.—Exchange National Bank is considering erection of bank building; steel construction; probably 10 stories high.

## CHURCHES

Anderson, S. C.—First Baptist Church, Rev. John F. Vines, pastor, will enlarge Sunday school room at cost of \$800 according to plans by J. H. Casey of Anderson.

Baltimore, Md.—St. Paul's Reformed Church, Rev. Lloyd E. Coblenz, pastor, awarded contract to Thomas L. Jones & Son, 410 West Saratoga St., Baltimore, for erection of edifice at Mulberry and Calhoun streets; Gothic architecture; 56x83 feet; stone and cement construction; gray granite exterior; cost \$30,000; plans by Joseph Evans Sperry, 409 Calvert Bldg., Baltimore. (Recently mentioned.)

Beaumont, Texas.—Baptist Church contemplates erecting edifice. Address Rev. J. J. Taylor.

Charleston, S. C.—Cannon Street Baptist Church, Rev. August Nielson, pastor, purchased site for \$5300 on which to erect edifice.

Dallas, Texas.—East Dallas Christian Church, Rev. Cephus Shelbourne, pastor, contemplates erecting edifice.

Dallas, Texas.—Westminster Presbyterian Church is considering erection of edifice; F. H. Dealey, chairman Board of Trustees.

Dickinson, Texas.—Methodist Episcopal congregation contemplates erecting edifice. Address The Pastor, Methodist Episcopal Church.

Fort Worth, Texas.—Christian Church will erect edifice to cost between \$75,000 and \$100,000. Address The Pastor, Magnolia Christian Congregation.

Fort Worth, Texas.—Methodist congregation will erect edifice to cost \$75,000. Address The Pastor, Central Methodist Church.

Hagerstown, Md.—Trinity Lutheran Church, Rev. J. I. Simon, pastor, 135 N. Potomac St., expects to open bids about May 15 for erection of edifice; auditorium, 60x90 feet; combination gas and electric fixtures; estimated cost \$60,000; plans by A. A. Ritcher, Lebanon, Pa. (Previously mentioned.)

Henning, Tenn.—Methodist Episcopal Church South, Rev. S. H. Blackwell, pastor, is having plans prepared for edifice recently mentioned by L. M. Weathers, Scimitar Bldg., Memphis, Tenn.; 42x64-foot brick church and Sunday-school annex; galvanized-metal shingle roof; ordinary construction; hot-air heat; lighting not decided; cost \$5500.

Houston, Texas.—Methodist Church purchased site 125 feet square for \$12,000 on which to erect edifice. Address The Pastor, Tabernacle Methodist Congregation.

Houston, Texas.—Shearn Methodist Church, Dr. J. E. Wray, pastor, accepted plans by Sanguinett & Staats, Fort Worth, Texas, for edifice, and expects bids for construction will be invited within 30 days; structure of gray brick with dressed-stone trimmings; Gothic style of architecture; seating capacity 600, but can be increased to 2500; interior in shape of amphitheater with Greek cross extensions at sides and ends; Sunday-school rooms, minor auditoriums, etc., can be added by means of furling and rolling doors to be added to main auditorium; three galleries; cost \$200,000. (Recently mentioned.)

Kansas City, Mo.—M. E. Church is receiving bids on erection of proposed edifice; \$200,000 available. Address The Pastor, Grand Avenue M. E. Congregation.

Lumberton, N. C.—First Baptist Church will have plans prepared by J. M. McMichael, Charlotte, N. C., for edifice to cost \$25,000; S. McIntyre, chairman building committee.

Memphis, Tenn.—Presbyterian congregation will erect edifice to cost \$15,000. Address The Pastor, Second Presbyterian Church.

North Wilkesboro, N. C.—First Baptist Church will open bids about May 1 for erection of \$12,000 edifice recently mentioned; plans by J. M. McMichael, Charlotte, N. C.; colonial style; 50x60 feet; brick with slate roof; 700 to 800 seating capacity, including Sunday-school department; ordinary construction; hot-air or steam heat; electric lighting; will receive bids; H. W. Horton, secretary building committee.

Orangeburg, S. C.—Christian Congregation, Rev. S. D. Colyer, pastor, will erect edifice.

Palestine, Texas.—Methodist Church will erect edifice. Address The Pastor, Centenary Methodist Church.

Richmond, Va.—Union Station Methodist Episcopal Church, Rev. R. H. Potts, pastor, will remodel edifice; improvements will include steam-heating plant and electric lighting; cost \$5000.

Russellville, Ala.—Baptist Church, John W. Partridge, pastor, will consider competitive plans from architects for \$10,000 edifice recently mentioned; building to be of brick; seating capacity about 600; several Sunday-school rooms; hot-air heat; lighting not decided; bids probably opened before June 1.

Russellville, Ala.—Baptist Congregation will erect brick edifice to cost \$10,000. Address The Pastor, Baptist Church.

Savannah, Ga.—Methodist Congregation will erect edifice. Address The Pastor, Asbury Methodist Church.

Texarkana, Ark.—Episcopal Church will erect edifice. Address The Pastor, St. Andrew's Episcopal Congregation.

Wichita Falls, Texas.—M. E. Church, South, had plans prepared by Flanders & Flanders, Dallas, Texas, for \$25,000 edifice previously mentioned; two-story brick structure; 60x120 feet; steam heat; electric and natural gas lighting. T. B. Noble may be addressed.

## COURTHOUSES

Arnett, Okla.—Ellis county will vote on issuance of \$50,000 of bonds for erection of courthouse at Arnett. Address County Commissioners, Grand, Okla.

Groesbeck, Texas.—Limestone County Commissioners have selected architect to prepare plans for remodeling courthouse; estimated expenditure, \$30,000.

Moorefield, W. Va.—Hardy county awarded contract to Branson Snider, Wardsville, W. Va., for erection of courthouse recently noted; three-story semi-fireproof structure; 50x75 feet; hot-air heat; acetylene-gas lighting; cost \$15,000; plans by contractor. (See "Machinery Wanted.")

Nashville, Tenn.—Davidson county will invite bids within next 30 days for remodeling courthouse according to plans by C. K. Colley of Nashville; additional story will be built; exterior of first story, being of stone, will be redressed; second and third stories

will be veneered with gray brick; fourth or new story will be faced with same grade of gray brick; ornamentation on columns will be restored; old gables on ends will be replaced with balconies with iron balustrades; all new work will be trimmed with white Bowling Green limestone; roof will be of steel and concrete; all interior woodwork will be replaced with hardwood, quartered oak finish; appropriation \$75,000. (Recently mentioned.)

Orange, Va.—Orange County Supervisors will open bids about May 1 for remodeling courthouse after plans by Chas. M. Robinson, Richmond, Va.; annex recently described; steam or hot-water heat; electric lighting; cost \$10,000; C. W. Woolfolk, clerk.

Panhandle, Texas.—Carson County Commissioners awarded contract to Falls City Construction Co., Louisville, Ky., for erection of courthouse and jail, to cost \$48,500.

Roby, Texas.—Fisher county will erect courthouse to cost \$80,000; contract to be let at May term of court. Address County Commissioners.

Springfield, Mo.—Greene county will have plans prepared by Miller, Opell & Torbitt of Springfield for courthouse to cost probably \$250,000. (Recently mentioned.)

Warrenton, Ga.—County will rebuild courthouse and jail recently reported burned; plans not made; M. E. English, chairman Board of County Commissioners.

## DWELLINGS

Allendale, S. C.—Jas. M. Patterson will have plans prepared for brick veneer residence by Precher & Holman, Dyer Bldg., Augusta, Ga.

Atlanta, Ga.—F. D. McMillan, 20 West 15th St., owner, has prepared plans for and will erect \$30,000 dwelling; 18 rooms; brick, reinforced concrete or wood; four stories; foundation, mill construction; steam heat; gas and electric lighting; marble and reinforced concrete steps. (See "Machinery Wanted.")

Baltimore, Md.—George H. Whittingham, president Monitor Manufacturing Co., 114 South Frederick St., awarded contract to G. Patterson, Elkton, Md., for erection of residence on Bancroft road; two and a half stories; finished in hardwood; cost \$7000.

Baltimore, Md.—Dr. Theo. Cooke, 914 North Charles St., awarded contract to Jerome Love, 124 South Jackson St., Baltimore, for erection of 24 dwellings on 1st street; two stories; brick; 16x60 feet; cost \$55,000; stone foundations; Carey roofing; hot-water heat.

Baltimore, Md.—E. W. Gorman, 201 Augusta Ave., is having plans prepared by F. E. Beall, 213 St. Paul St., Baltimore, for dwelling at Irvington; three stories; 16x64 feet; cost \$3500.

Baltimore, Md.—Walter E. Burnham, 2 Builders' Exchange, will erect residence at Ralston; eight rooms; site 40x120 feet.

Baltimore, Md.—John Burkhardt, 3324 East Lombard St., will erect residence at Belgrave; two and a half stories; site 50x150 feet.

Baltimore, Md.—Henry Hahn, 2301 East Oliver St., awarded contract to John Muller, 1600 North Montford Ave., Baltimore, for erection of two residences on Oliver street; 18x50 feet; two stories; brick. (See "Miscellaneous Manufacturing Plants.")

Baltimore, Md.—Mrs. Katherine W. Minor awarded contract to B. W. & E. Minor, 224 West Pratt St., Baltimore, for erection of dwelling at Walbrook; two stories and attic; frame; slate roof; steam heat; cost \$5000; plans by W. L. Minor.

Baltimore, Md.—Mrs. Katherine W. Minor awarded contract to B. E. & W. Minor, 20 Clay St., Baltimore, for erection of dwelling at Walbrook; two stories and attic; frame; slate roof; steam heat; cost \$4000; plans by W. L. Minor, 20 Clay St., Baltimore.

Baltimore, Md.—J. Randolph Forrester, 2019 West North Ave., will erect eight dwellings on Orem Park place; colonial style; 16x65 feet; three stories; cost \$50,000; plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore.

Baltimore, Md.—S. J. Naylor awarded contract to James L. Constantine, Arlington, Md., for erection of dwelling on Berwyn avenue; old English style; frame partly covered with shingles; slate roof; large porch; 10 rooms; steam heat.

Baltimore, Md.—Richard Keating, Reisterstown and Old Liberty roads, has had plans prepared by Clyde N. Friz, 11 E. Pleasant St., Baltimore, for erection of five dwellings on Reisterstown road; three stories; double type; 24x40 feet; cost \$25,000.

Baltimore, Md.—William G. Buckley, 301 St. Paul St., awarded contract to Harry W. Johnson, 2814 Rayner Ave., Baltimore, for erection of two frame dwellings after plans by D. C.

Slonaker, S. W. Cor. Pine and Fayette Sts., Baltimore; 2½ stories; 28x33 feet; hot-water heat; gas and electric lighting; cost \$4500 each.

Baltimore, Md.—B. W. & E. Minor, 20 Clay St., are having plans prepared by A. Lowther Forest, Professional Bldg., Baltimore, for two dwellings on Garrison avenue; 20x75 feet; two and a half stories; foundations heavy bluestone, laid in cement; slate roofs; hot-water heat; electric lights; ornamental frame front porches; cost \$4000 each.

Birmingham, Ala.—A. A. Adams, 2103 First Ave., awarded contract to Geo. Smallridge, Brown-Marx Bldg., Birmingham, for erection of \$15,000 residence after plans by W. C. Weston, Birmingham; two stories; brick veneered; red slate roof; hot-water heating; electric lighting.

Birmingham, Ala.—J. W. Bruce will erect two-story frame dwelling; ordinary construction; hot-air heat; gas and electric lighting; cost \$3000; contractor, J. W. Bensley, Birmingham.

Birmingham, Ala.—G. W. Pabst will erect two-story frame dwelling; ordinary construction; hot-air heat; electric lighting; cost \$4000; plans and construction by owner.

Birmingham, Ala.—Lewis Morris will erect residence in Glen Iris Park, to cost \$12,000.

Bryan, Texas.—A. M. Waldrop awarded contract to H. T. Lewis, Bryan, to erect two-story residence; plans by Tabor & Jones, Houston, Texas.

Charlotte, N. C.—McClung Realty Co. awarded contract to C. J. Stimpson, Charlotte, for erection of two bungalows.

Chattanooga, Tenn.—Chas. E. Bearden, architect, will erect for himself \$7000 residence at Riverview (suburb) recently mentioned; two stories and basement; brick and stucco; slate or tile roof; hot-water heat; wired for electricity and piped for gas; plumbing.

Chattanooga, Tenn.—W. P. McBroom, care Lookout Planing Mills, 1033 East Main St., has had plans prepared by Chas. E. Bearden, Chamberlain Bldg., Chattanooga, for 1½-story residence at Mission Ridge (suburb), recently noted; frame; shingle roof; seven rooms, size 50x65 feet; electric lighting.

Chesterfield County, Va.—Frank Jay Gould, New York, will erect bungalow in Chesterfield county, Virginia.

Chickamauga, Ga.—Crystal Springs Bleachery awarded contract for erection of 30 operatives' dwellings; cost \$30,000.

Dallas, Texas.—H. T. Scheer will erect residence; two stories and basement; brick veneer and stone; cost \$14,000.

Dallas, Texas.—G. Dreyfous will erect residence; two stories and basement; brick walls; roof Spanish dull tile; porch floors white and colored tile; first-floor rooms finished in hardwood.

Dallas, Texas.—D. S. Dunlap awarded contract to E. Kilgus, Dallas, for erection of residence; two stories; frame; cost \$6700; plans by Harrison & Thompson, Dallas.

Dallas, Texas.—Max Lingo has had plans prepared by C. D. Hill Co., Dallas, for residence; two stories; brick; cost \$12,000.

Daytona, Fla.—T. A. Snyder, Cincinnati, Ohio, awarded contract to S. H. Gove, Daytona, for erection of seven cottages at Daytona; California bungalow style; hot-air heat; cost \$25,000; plans by contractor.

El Reno, Okla.—Store Building—Lawrence Adams will erect store building; probably three stories; 39x100 feet; pressed brick trimmed with stone.

Fairmont, W. Va.—Hammond Fire-brick Co. will rebuild 11 dwellings reported burned; loss \$30,000.

Fort Worth, Texas.—Ben J. Tillar will erect residence.

Franklin, N. C.—H. H. Fudge and L. G. Bulgin will make plans for and construct proposed summer boarding-house; frame; two stories; 42x36 feet; porches 10 feet wide; cost \$3600; electric lighting contemplated.

Fredericksburg, Va.—Mrs. Anna P. Green awarded contract to A. M. Garner, Fredericksburg, for erection of two dwellings, to cost \$3000.

Gainesville, Ga.—Mrs. Hortense Bunkley will erect brick residence.

Gainesville, Ga.—T. E. Atkins will erect residence.

Hagerstown, Md.—Mrs. William T. Hamilton will restore old Carroll mansion to former colonial style.

Johnson City, Tenn.—C. B. Allen, owner, will erect 15-room frame residence; steam heat; passenger elevator.

Johnson City, Tenn.—Frank Brown will erect residence.

Johnson City, Tenn.—J. Fred Johnson will erect residence.



Kansas City, Mo.—J. A. Shilling will erect eight dwellings.

Kansas City, Mo.—William H. Wallace has had plans prepared by L. Grant Middaugh, Kansas City, for remodeling residence; will be 80x96 feet; native Oitic stone; cut-stone trimmings; library will be mission style, 17x28 feet; mantel, bookcases and ceiling beams of solid black walnut; entertainment room on third floor, 34x41 feet; roof garden; cost of improvements, \$40,000.

Kansas City, Mo.—George S. Hovey awarded contract to J. Hellman, Kansas City, for residence recently mentioned; 42x52 feet; ordinary construction; hot-water heat; electric lights; cost \$20,000; plans by Shepard & Farrar, Kansas City.

Kansas City, Mo.—Sidney J. Smith has had plans prepared by Shelby H. Kurfsa, Kansas City, for dwelling and garage, to cost \$20,000; stucco, frame and ornamental brick; 70x35 feet.

Lauraville, Station Baltimore, Md.—F. R. Hoare, Markley Ave., near Harford Rd., awarded contract to Walter B. Breyer, Harford Rd. and Beechwood Ave., Baltimore, for residence; frame construction; seven rooms and bath; gas and electric lights; cost \$3500; plans by Anderson & Zinck, Baltimore.

Little Rock, Ark.—John S. Braddock awarded contract to Leird & Price for erection of residences recently mentioned; five two-story frame dwellings.

Louisville, Ky.—John Bartfield will erect \$4000 residence.

Louisville, Ky.—Slaughter Carter will erect \$5000 residence.

Lynchburg, Va.—P. A. Kries awarded contract to C. W. Hancock & Sons, Lynchburg, for erection of residence; Colonial style; red brick; marble and terra-cotta trimmings; slate roof; fireproof construction; steel floors and roof beams; two stories and basement; 15 rooms; deck roof for observatory; basement under entire building, with cement floor; vapor system of heating; cold-storage plant and ice-making machinery in basement; main hall, 15x50 feet, finished with heavy mahogany pilasters and cornice; large porch in front running through two stories, supported by six Ionic columns; 14-foot porches on both sides, with open porches connecting front and side porches, all having tile floors; first floor finished in natural mahogany; floors of Tennessee quartered oak and mantels of carved mahogany; plans by Frye & Chesterman, Lynchburg.

Magnolia, Miss.—H. C. Moore will erect two-story dwelling; 30x50 feet; nine rooms, reception hall and kitchen; plans and construction by Louis Lenoir, Magnolia.

Magnolia, Miss.—Wm. T. Caldwell, recently noted to award contract to W. W. Easley, Magnolia, will erect structure 52x72 feet; bath; front and back porches; grates; electric lights; cost \$3000.

Marion, Ala.—Frank S. England will erect residence.

Marion, Va.—W. V. Birchfield will erect \$5000 residence; brick foundation; colonial columns; colonnade grilles; cabinet and brick mantels; tile hearths; hot-water heating; plumbing; electric lighting; plans by Burnett & Owens, Bristol, Tenn.

Nashville, Tenn.—J. O. Leake will erect residence.

Nashville, Tenn.—E. A. Lindsey will award contract during April for erection of two-story gray vitrified-brick residence recently mentioned; hot-water heat; gas and electric lighting; cost \$20,000; plans by C. K. Colley, Nashville. (See "Machinery Wanted.")

New Orleans, La.—P. J. Donegan, 510 Felicity St., has had plans prepared by Ridgely Bros., New Orleans, for double cottage.

New Orleans, La.—Metropolitan Building Co. will erect double cottage; frame slated.

New Orleans, La.—W. Johnson has had plans prepared by N. Shaddinger, New Orleans, for double frame cottage.

New Orleans, La.—William Lafferriere has had plans prepared by R. Sidney Hernandez, New Orleans, for double frame cottage.

New Orleans, La.—Joseph F. Seewns is having plans prepared by Charles O. Woodcock, 204 Camp St., New Orleans, for double residence; two stories; frame; 12 rooms; electric lights; brick foundation; slate roof.

New Orleans, La.—Three Dwellings.—Alexander Hay, 127 Carondelet St., New Orleans, has prepared plans for double two-story residence (contract No. 135); 50x90 feet; fireplaces; gas and electric lighting; cost \$3000; bids to be opened about April 30. Plans by same architect (contract No. 137) are for double two-story residence; 65x50 feet; outside, cement block and stucco; grates and gas steam radiator heating; gas and electric lighting; cost \$7000; bids to be opened late in April. Mr. Hay has also prepared plans

(contract No. 134) for additions and alterations to \$4500 residence; to have fireplaces and gas steam radiators; electric and gas lighting.

New Orleans, La.—Leon Jacobs, 409 St. Charles, and Dr. Barnett, 817 Howard Ave., will erect six double dwellings; two stories; frame slated; slate roof; brick foundation; electric wiring; plumbing; cost \$30,000; bids to be opened soon.

Norfolk, Va.—Mrs. Mary E. Davis will erect residence in Ghent; Killbaugh & Bayne, Norfolk, contractors.

Norfolk, Va.—L. E. Flickenger will erect residence at Riverview; two stories; frame; cost \$3500.

Norfolk, Va.—F. M. Killa will erect \$10,000 residence; owner will superintend construction by day work.

Norfolk, Va.—Sarah F. Baker awarded contract to Mercer & Casperson, Norfolk, for erection of three double brick tenements; cost \$5000.

Orlando, Fla.—Charles Sprouss, Toledo, Ohio, will erect residence in Orlando.

Rippon, W. Va.—William Wilt will erect \$6000 residence.

Ruxton, Md.—Stuart Olivier, The News, Calvert and Fayette streets, Baltimore, Md., awarded contract to Brown & Morgan, Builders' Exchange, Charles and Lexington Sts., Baltimore, for erection of bungalow at Ruxton; plans by Clyde N. Friz, 11 E. Pleasant St., Baltimore.

Salisbury, Md.—Owens & Sisco, Continental Bldg., Baltimore, Md., have prepared plans for residence at Salisbury; two and a half stories; frame; colonial style; hot-water heat; plumbing; cost \$10,000.

Sapulpa, Okla.—Mrs. Frank P. Smith will award contract to Casey & Carroll, Sapulpa, for erection of residence recently mentioned; plans by A. J. Lowber, Sapulpa; two stories; frame; 28x48 feet; natural-gas heating; electric and gas lighting; cost \$3000. (See "Machinery Wanted.")

Savannah, Ga.—C. A. Emerson has had plans prepared by J. de Bruyn Kops, Savannah, for residence; mission style; 58x50 feet, including porches; outside will be plaster; tile roof; massive front door with side lights of bevel leaded glass.

Somerset, Ky.—J. Sherman Cooper will erect residence.

St. Louis, Mo.—S. H. Rodway will erect \$10,000 residence.

St. Petersburg, Fla.—Mrs. Mary Fisher will erect residence; two stories; 34x42 feet; seven rooms, washroom, bath and two halls, 10x30 feet each; two large porches; one porch screened with brass screening; exterior shell-dash finish; asbestos shingle roof; halls, dining and living rooms finished in paneled weathered oak; cost \$5000; R. E. Sykes, St. Petersburg, contractor.

Tampa, Fla.—Joaquin Lopez awarded contract to Southern Lumber & Supply Co., Tampa, for erection of residence recently mentioned; one-story and basement; bungalow; Washington hydraulic pressed brick; upper part of building frame; asbestos slate roof; five-foot tile wainscoting in bathroom with floor of mosaic tile; laundry and hot-air furnace in bathroom; cost \$16,250; plans by A. H. Johnson, Tampa.

Terrell, Texas.—Flanders & Flanders, architects, will receive bids until April 26 for erection of two-story residence.

Van Buren, Ark.—S. R. Chew will erect \$10,000 brick and stone residence.

Warrenton, Ga.—W. F. Wilhoit will rebuild dwelling recently reported burned.

Warrenton, Ga.—D. L. Wicker will rebuild two-story brick veneer dwelling recently reported burned; to have grates and acetylene-gas lighting; plans not prepared.

Warrenton, Ga.—C. W. Cason will rebuild dwelling recently reported burned.

Washington, D. C.—Isaac T. Mann, Bramwell, W. Va., will not at present erect residence on site recently reported purchased.

Washington, D. C.—L. H. Reichelderfer, The Burlington, is having plans prepared by Wood, Donn & Deming, 808 17th St. N. W., Washington, for dwelling on Connecticut avenue; three stories; 25-foot frontage; Italian renaissance style; rough buff brick laid in Flemish bond; terra-cotta trimmings; Palladian window ornamented by wrought-iron balcony; red tile roof; copper cheneau.

Washington, D. C.—William F. Lemon, 1219 L St. N. W., has had plans prepared by Boal & Brown, 1725 H St. N. W., Washington, and awarded contract to John Nolan, 1413 G St. N. W., Washington, for erection of residence on Kalorama road; Colonial style; 36x36 feet; wrought brick laid in Flemish bond, with white mortar joints; limestone trimmings; red glazed tile roof; ornamental en-

trance, with French windows on either side; dining-room finished in white wainscot panels.

Washington, D. C.—Joseph Thropp, 1701 20th St., New York, has not engaged architect to prepare plans for two dwellings recently mentioned; structures will be 20x80 feet; stucco; hot-water heat; gas and electric lighting; site to occupy three lots; owner has purchased and will enlarge adjoining corner residence.

Wheeling, W. Va.—John Kindelberger awarded contract to E. O. Grimm, Glenova, W. Va., for erection of \$4000 dwelling at Warwood; 2½ stories; 25x46 feet; ordinary construction; natural-gas lighting; plans by Harry Taylor, Glenova.

Wheeling, W. Va.—Geo. H. Dieringer, Wheeling, W. Va., has not completed plans for dwelling for Margaret Wieler recently mentioned; to have gas heating; gas and electric lighting; 12 rooms; colonial; cost \$5000; J. W. Wieler, agent, 90 15th St.

## GOVERNMENT AND STATE BUILDINGS

Dothan, Ala.—Postoffice.—U. S. postoffice and courthouse building will be of fireproof construction; 54½x86½ feet; steam heat; electric lighting; cost \$84,000; plans by James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C.; Pharrow Construction Co., 210½ Auburn Ave., Atlanta, Ga., recently noted as lowest bidder.

Fort Oglethorpe, Ga.—Buildings.—George Becking of Chattanooga has been awarded contract for erection of two quarters for field officers and double quarters for two lieutenants at Fort Oglethorpe; former will be 38x48 feet; white pine or hard cypress interior finish; plumbing; latter will be 48x61½ feet; birch interior finish; all buildings to be two stories, with basement and attic; brick; tile or slate roof; cement floor in basement; concrete footings; cabinet mantels; tile in bathroom; steam heat; acetylene-gas lighting; cost \$35,000. (Recently mentioned.)

Little Rock, Ark.—Capitol.—George W. Donaghey, Governor, in special message to both House of Representatives and Senate relative to new Capitol building, recommended that all defective work and material be removed and replaced, and suggested that \$795,000 be appropriated for completion of building; Senate has voted to retain George R. Mann of Little Rock as architect. (Recently mentioned.)

Raleigh, N. C.—Hospital.—State Hospital Commission will receive bids until April 26 for 5850 feet 6 and 8-inch sewer with house connections to 11 buildings at State Hospital for Insane at Raleigh, N. C.; wiring for electric-lighting institution; construction of laundry buildings and necessary laundry machinery for same. Commission will also receive bids until May 11 for construction of congregate dining-room, two buildings for consumptives, four cottages for attendants and employees, alterations to two existing buildings and plumbing and heating for same at State Hospital, Raleigh; certified check of 2 per cent. to accompany each bid. Plans and specifications may be had by addressing architects, Barrett & Thomson, Raleigh, N. C.; W. A. Erwin, chairman building committee, State Hospital Commission, West Durham, N. C. (See "Machinery Wanted.")

Ruston, La.—Postoffice.—Hazle Construction Co., Dallas, Texas, has contract to erect U. S. postoffice at Ruston; cost \$46,000. (Recently mentioned.)

Sabillasville, Md.—Hospital.—Wyatt & Nolt, Keyser Bldg., Baltimore, Md., have prepared plans and specifications for proposed hospital building for Maryland Tuberculosis Sanatorium near Sabillasville, and bids were opened April 19; building is to be two and one-half stories; frame; wide verandas.

## HOTELS

Chase City, Va.—Mecklenburg Mineral Springs Co. will rebuild Mecklenburg Hotel, recently reported burned at loss of \$300,000.

Houston, Texas.—Rice Hotel Co. incorporated with \$40,000 capital stock by H. Hamilton, James E. Daley, Walter E. Hawley and others.

Lonoke, Ark.—J. C. Clements purchased Lonoke Hotel and is considering plans for erection of annex; first floor of present building to be used for offices; second floor of annex for opera-house and banquet hall.

Macon, Ga.—Foor & Etheridge of Lanier Hotel will erect 100-room annex to hotel and remodel present building; expenditure reported to be \$100,000.

Princeton, W. Va.—Princeton Hotel & Res-

taurant Co. incorporated with \$10,000 capital stock by J. P. Chapman, Beury, W. Va.; Isaac Ash, Caperton, W. Va.; Dally Woods, Winona, W. Va., and others; will erect three-story building, 80x29 feet; ordinary construction; steam heat; electric lighting; cost \$4000. Address Company, care J. P. Chapman, Beury, W. Va.

San Mateo, Fla.—San Mateo Fruit Co. will erect 50-room hotel. (See "Miscellaneous Enterprises.")

Shelby, N. C.—A. H. Webb and J. E. Beam purchased Cleveland Springs property for \$16,000 and will erect hotel.

Stamford, Texas.—Plans have been accepted for three-story annex to Stamford Inn to cost \$40,000.

Tulsa, Okla.—C. C. Drew is having plans prepared by Hugenin & Sweenen of Tulsa for hotel; seven stories; reinforced concrete; fireproof.

Walhalla, N. C.—J. D. Verner, owner, will remodel by days' work hotel structure recently mentioned; cost \$3000. (See "Machinery Wanted.")

## MISCELLANEOUS STRUCTURES

Aconac, Va.—Jail.—Aconac county will erect jail building to replace old structure. Address County Commissioners.

Asheville, N. C.—Business Building.—Asheville Wholesale Drug Co. awarded contract to W. H. Westall, Asheville, for erection of business building; two stories and basement; brick; 50x100 feet.

Asheville, N. C.—Store Building.—S. Stenberg will erect addition to store building; two stories and basement; brick.

Baltimore, Md.—Orphanage.—Hebrew Children's Sheltering and Protective Association, Alsquith and Lexington Sts., has plans by Joseph Evans Sperry, Calvert Bldg., Baltimore, for proposed orphanage at Broadway and Fairmount avenue, to be known as Betsy Levy Memorial Building; will remodel building now on site and erect addition; three stories and basement; facade of press brick with cut-stone trimmings; 85x47 feet; large porch; connected with present building by short corridor; two structures will be separated by arway; contractors estimating include Charles L. Stockhausen, National Marine Bank Bldg.; George Bunnecke & Sons, 305 St. Paul St.; Thomas P. Johns, 1514 Harford Ave.; Henry Smith & Sons Company, 116-120 South Regester St.; Morrow Bros., 218 West Saratoga St.; R. H. Frazier & Son, 220 St. Paul St., all of Baltimore. (Previously mentioned.)

Baltimore, Md.—Pythian Castle.—Knights of Pythias, James Whitehouse, grand keeper, 129 North Gay St., planning erection of \$100,000 Pythian Castle to replace present structure.

Baltimore, Md.—Hospital.—Maryland General Hospital, Linden Ave. and Madison St., is planning to erect addition—nurses' home and chapel; three stories; brick; cost \$15,000.

Baltimore, Md.—Store and Dwelling.—Samuel E. Jacobson, 1510 Gough St., awarded contract to Morris Silberstein, Calvert Bldg., Baltimore, for erection of store and dwelling on Gough street; two stories; buff brick; stone trimmings; 16x60 feet; cost \$3000.

Baltimore, Md.—Store Building.—Joseph M. Zamoiski Electrical Co., 409 West Lexington St., has secured building at 19 North Liberty street and will expend \$8000 for improvements.

Barbourville, Ky.—Jail.—Knox county will make proposed additions to county jail; F. D. Sampson, Judge County Court. (See "Machinery Wanted.")

Charlottesville, Va.—Store Building.—J. B. & W. H. Wood awarded contract to King Lumber Co., Charlottesville, for erection of store building; 25x125 feet; three stories and basement; cost \$15,000.

Chattanooga, Tenn.—Mercantile Building, etc.—L. B. Price, 833 Market St., is receiving proposals for erection of two-story mercantile building and apartment-house; first story concrete; second story frame; composition roof; work to be commenced about May 1.

Chattanooga, Tenn.—Mercantile Building.—Trotter Bros., 1132 Market St., awarded contract to Wilbur M. Johnson, 502 East 4th St., Chattanooga, for erection of five-story and basement brick mercantile building at 11th and King streets; standard mill construction; 60x150 feet; composition roof; brick laid in cement and lime mortar; concrete basement floor; two electric freight elevators; hot-water heat; automatic sprinklers; electric lighting; plumbing, lighting fixtures and sprinklers not included in contract. (Previously noted.)

Chattanooga, Tenn.—Sanitarium.—Tuberculosis Sanitarium Association, care of Dr.

E. B. Wise, 7½ West 8th St., will be incorporated by D. B. Loveman, Dr. Y. L. Abernathy and others; contemplates erection of building.

Chattanooga, Tenn.—Mercantile Building.—Geo. B. Glenn, care of Chattanooga Feed Co., 1351 Market St., is having plans prepared by Chas. E. Bearden, Chamberlain Bldg., Chattanooga, for two-story brick mercantile building recently described.

Cisco, Texas—Store Building.—L. B. Platt will erect store building; two stories; brick; cost \$5000.

Clarksdale, Miss.—Lodge Building.—Sealed bids will be received by C. B. Bowers, secretary Clarksdale Lodge No. 977, B. P. O. Elks, Clarksdale, for construction of lodge building recently mentioned; certified check for \$100, payable to A. W. Moseley, E. R., Clarksdale; plans and specifications from architects, Keenan & Weiss, Hibernia Bank Bldg., New Orleans, La., on deposit of certified check for \$25; uniform contract will be used.

Coalgate, Okla.—Jail.—Coal county will erect jail building at Coalgate. Address County Commissioners.

Crawford, Ga.—Business Building.—J. G. Chandler will erect brick business building.

Dallas, Texas—Business Building.—Ban Abdon will erect two-story business building.

Dallas, Texas—Business Building.—Dan Sonnenhriel will erect four-story business building.

Dallas, Texas—Mercantile Building.—E. H. Ray had plans prepared by C. D. Hill & Co. for erection of mercantile building recently mentioned; 37x90 feet; three stories and basement; pressed brick; stone front; mill construction; steam heat; freight elevators; cost \$22,000; bids to be opened about May 1.

Dallas, Texas—Store Building.—Bids will be received until May 4 by Lang & Witchell, architects, Dallas and Houston, Texas, for erection of first section of Sanger Bros.' store building in Dallas; 50x100 feet; eight stories and basement; steel skeleton; fireproof; brick, terra-cotta and reinforced concrete; plans on file at Dallas and Houston offices of architects; certified check for \$5000. (Mentioned in March.)

Fairfax, S. C.—Store.—Mrs. M. E. Terry had plans prepared for double store building by Preacher & Holman, Dyer Bldg., Augusta, Ga.

Hampton, Va.—Bathhouse.—Newport News & Old Point Railway Co. awarded contract to C. T. Holtzclaw, Hampton, for plans for and erection of seaside bathhouse; one story; frame; 78x152 feet; electric lighting; cost \$10,000.

Heber, Ark.—Mercantile Building.—J. N. Barratt will erect two-story brick commercial building; 32x90 feet; construction commenced.

Heber, Ark.—Store.—Dr. Richardson will erect two buildings with plate-glass fronts; sizes 40x90 and 20x50 feet.

Heber, Ark.—Drug Store.—J. P. Lackey will erect two-story brick or stone building; 25x60 feet; to be occupied by Heber Drug Co.

Hennessey, Okla.—Mercantile Building.—John Smith had plans prepared by Frank Noll for brick business building recently mentioned; structure 25x140 feet; hot-air heat; electric lighting; cost \$6000; construction by days' work.

Jackson, Ga.—Business Building.—E. I. Hooks, Jackson, has contract for erection of two one-story brick business buildings on 3d street.

Johnson City, Tenn.—Business Building.—Courtney Cox will erect three-story brick business building.

Kansas City, Mo.—Store Building.—Emery-Bird-Thayer Dry Goods Co. will expend \$100,000 for improvements to building; will erect additional story with 10,000 square feet floor space, making building seven stories; arcade will be extended 72 feet north of present terminus; will install two passenger elevators.

Kansas City, Mo.—Mercantile Building.—Gloyd Lumber Co. opened bids April 15 for erection of reinforced concrete mercantile building; plans by J. W. McKeekie, 716 New York Life Bldg., Kansas City; electric lighting; cost \$175,000. (Recently noted under "Bank and Office Buildings.")

Lagrange, Ga.—Lodge Building.—Elks' Home Co. awarded contract to Cleveland & Gladney, Lagrange, for erection of \$15,000 Elks' home; brick; two stories; electric lighting; plans by Park A. Dailis, Atlanta, Ga.

Marline, Texas—Business Building.—I. J. Nathan awarded contract to Brothman & Son, Temple, Texas, for erection of business building; one story; brick; cost \$5000.

Memphis, Tenn.—Hospital.—Shelby county

has had plans prepared by Jones & Furbringer, Memphis, for tuberculosis hospital; one story; frame; fan shaped with four wings; 190x100 feet; each wing to accommodate 60 patients.

Meridian, Miss.—Home.—Mississippi Masonic Widows and Orphans' Home will erect annex to hospital and improve dormitory.

Nashville, Tenn.—Association Buildings.—Plans, sketches and specifications will be received by Percy Warner, chairman of building committee, or W. S. McGill, secretary, until May 3 for proposed Y. M. C. A. and Y. W. C. A. buildings, to cost, respectively, \$175,000 and \$75,000; bids to be submitted as follows: First, submit sketches, floor plans, etc., together with cost; second, give plans and specifications, together with cost; third, give plans and specifications, including bid for supervision of construction.

Norfolk, Va.—Store Building.—D. Pender will erect addition to store building, to cost \$4500; G. T. Banks, Norfolk, contractor.

Norfolk, Va.—Store Building.—D. Pender Grocery Co. awarded contract to George Banks, Norfolk, for erection of addition to store building, to contain 5100 feet floor space; bakery will be removed to third floor, and three ovens 12x14 feet, weighing 180,000 pounds, will be installed.

Panhandle, Texas—Jail.—Carson county awarded contract to Falk City Construction Co., Louisville, Ky., for erection of county jail and courthouse at Panhandle to cost \$48,500.

Pensacola, Fla.—Jail.—Escambia county contemplates issuing \$75,000 of bonds to erect new jail building at Pensacola. Address County Commissioners.

Pensacola, Fla.—Clubhouse.—Progress Club will erect three-story clubhouse; brick, with marble trimmings; cost \$25,000.

Pine Bluff, Ark.—Hospital.—Ladies' Hospital Association will issue \$16,000 of bonds to complete hospital building.

Pine Bluff, Ark.—Monk & Ritchie, Pine Bluff, at \$16,255, have contract for erection of Knox-Seull building; 67x154 feet; two stories; plans by C. L. Thompson, Little Rock, Ark.

Port Arthur, Texas—Business Building.—Laughlin & Barrier will erect business building; concrete; 50-foot front; front finished in pressed brick.

Richmond, Va.—Clubhouse.—Commonwealth Club will probably issue \$35,000 of bonds to erect addition to clubhouse.

Richmond, Va.—Clubhouse.—Commonwealth Club is considering issuing \$35,000 bonds to erect annex to clubhouse.

Salisbury, Md.—Fair Buildings.—Wicomico Fair Association, D. J. Ward, president, awarded contract to John W. Windsor, Salisbury, for erection of buildings recently noted; grand stand and exhibit hall combined, 45x200 feet; 100 stables 10x12 feet, and 12x12-foot judges' stand; cost \$7500; plans by D. E. Parker, Salisbury.

Searcy, Ark.—Jail.—White county, R. W. Chrisp, County Judge, Searcy, will open bids May 14 (postponed date) for enlargement of and improvements to county jail recently mentioned. (See "Machinery Wanted.")

St. Louis, Mo.—Natorium.—Crystal Natorium & Amusement Co. incorporated with \$16,000 capital stock by Josh Lewis, O. J. Weber and Oscar Weber.

St. Louis, Mo.—Clubhouse.—Tower Grove Turnverein has had plans prepared by William Lucas, St. Louis, for clubhouse; brick, stone and terra-cotta; 100x108 feet; four stories; cost \$80,000.

Tulsa, Okla.—Business Building.—Thomas Kinley awarded contract to Bronson Bros., Tulsa, for erection of business building to cost \$10,348.

Washington, D. C.—Business Building.—P. W. Pickford, 1333 G St. N. W., will erect business building on M street N. W.; three stories; brick; cost \$60,000.

Washington, D. C.—Clubhouse.—Cosmos Club, 1520 H St. N. W., is planning to erect \$100,000 clubhouse; present rooms will be remodeled.

Washington, D. C.—Store and Dwelling.—Joseph C. Williams has had plans prepared by Spelden & Spelden, 1403 New York Ave. N. W., Washington, for store and dwelling at 7th street and North Carolina avenue S. E.; 28x38 feet; red brick with stone trimmings.

Washington, D. C.—Car Barn.—Capital Traction Co. awarded contract to J. L. Parsons, Union Trust Bldg., Washington, for reinforced concrete and brick car barn recently described; fireproof; 290x150 feet; all contracts let.

Wichita Falls, Texas—Jail.—Wichita county has not selected architect to prepare plans

for \$15,000 jail recently noted; M. F. Yeager, County Judge, Wichita Falls.

Yorktown, Texas—Business Building.—Nau Bros. will erect two-story brick business building; cost \$7000.

## MUNICIPAL BUILDINGS

Ada, Okla.—City Hall.—Bids will be received at office of W. B. Jones, City Clerk, City Hall, until April 28 for construction complete of city hall as per plans and specifications of L. Macklemurry, architect, on file with City Clerk; building is to be of brick and stone, no plumbing included; each bid to be accompanied by a certified check equal to 3 per cent. of bid.

Albany, Ga.—City Hall.—City awarded contract to C. D. Smith of Albany for erection of city hall; contract price, \$26,000, exclusive of excavations, heating and plumbing; structure is to be of brick and stone; site 85x125 feet; plans by Robinson & Reidy, St. Augustine, Fla.; H. A. Tarver, Mayor. (Recently mentioned.)

Alva, Okla.—City Hall, etc.—City has voted \$30,000 of bonds for city hall, jail and firehouse; A. N. Devin, City Clerk.

Baltimore, Md.—Park Buildings.—Baltimore Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until April 28 for addition to and alterations in Patterson Park Field Building for use of Board of Park Commissioners and Free Public Bath Commission; certified check, \$500; also until April 28 for erecting two wings to Mansion-house in Carroll Park; certified check, \$500; drawings and specifications for both improvements on file at office of Edward D. Preston, Building Inspector, City Hall; work at Patterson Park is to consist of addition to bathhouse 90 feet long and width of present building; addition to Carroll Park Mansion-house is also to provide baths; each wing to be one story and basement, 28x26 feet; both tub and shower baths to be supplied with hot and cold water; sanitary fixtures, etc.

Dallas, Texas—Fire Station.—J. B. Winslett, City Secretary, will receive bids until April 30 to build fire station in Oak Lawn as per plans and specifications on file in office of Hubbell & Greene, architects, North Texas Bldg., Dallas; painting, plumbing and wiring will be let by separate contract; certified check, \$250.

Dallas, Texas—Coliseum.—State Fair Directors, Park Commissioners and Coliseum Committee propose to organize Dallas Coliseum Corporation with \$100,000 capital stock to erect coliseum; H. H. Adams, chairman of committee. (Recently mentioned under "Government and State Buildings.")

Enid, Okla.—City Hall and Fire Department.—City awarded contract to Zene Sexton of Enid for erection of combined fire department and city hall building; two stories; brick; 75x150 feet; first floor to contain fire department and upper floor city offices, etc. (Recently mentioned.)

Graymont, P. O. Birmingham, Ala.—Fire Station.—Plans were received for Graymont Fire Department building until April 20; full information furnished by W. A. Lester, Mayor.

Houston, Texas—Auditorium.—City will have plans prepared by Mauran, Russell & Garden of St. Louis, Mo., for auditorium; concrete; fireproof; probably 250x150 feet; seating capacity 8000 to 10,000; H. B. Rice, Mayor.

Mobile, Ala.—Engine-house.—Bids will be received at office of Patrick J. Lyons, Mayor, for erection of brick fire-engine house until April 26; plans and specifications at office of Building Inspector.

Morristown, Tenn.—City Hall.—City will erect two-story frame building to cost \$2500; will contain offices for city officials, police and fire department, jail, etc.; work begun under supervision of Aldermen Caldwell and Goodson.

New Orleans, La.—Fire Station.—City is considering appropriation of \$8000 for engine-house in Eleventh ward on 1st street; W. J. Hardee, City Engineer.

St. Louis, Mo.—Board of Public Improvements, A. J. O'Reilly, president, awarded following contracts: Clinton W. Watson at \$13,700 for erection of concrete addition to cellhouse at the workhouse; McCully Construction Co. at \$21,949 for engine-house No. 48; Hoosac Building & Construction Co. at \$15,423 for engine-house No. 40; Hoban Plumbing & Heating Co. for installation of heating plant in latter structure; contract for heating in No. 48 was not let; bids for open-air swimming-pool in Mississippi River were rejected, and new bids will be opened April 27; estimated cost, \$15,000.

St. Petersburg, Fla.—Library.—City is considering issuance of \$20,000 of bonds to erect

and equip public library. Address The Mayor.

Vernon, Texas—City Hall.—City awarded contract to John A. White of Vernon to erect city hall to cost \$15,000.

## RAILWAY STATIONS

Baltimore, Md.—Pennsylvania Railroad Co., James McCrea, president, and A. C. Shand, chief engineer, Broad Street Station, Philadelphia, Pa., has filed with City Comptroller blueprints outlining proposed Union Station after plans by Wm. H. Cookman of company's engineering department; plans involve 50-foot extension of present building, alteration of bridges, installation of passenger elevators, etc.; building improvements estimated to cost \$1,000,000 and other betterments to cost an additional \$1,000,000; understood this station when completed will be fourth in size and importance on Pennsylvania system.

Fort Worth, Texas.—Chicago, Rock Island & Pacific Railway, J. B. Berry, chief engineer, Chicago, Ill., will erect proposed \$5000 freighthouse; plans by A. T. Hawk, Chicago; construction by company's force; one-story structure; 30x144 feet; prepared roofing; plumbing; scales; electric lighting.

Louisville, Ky.—Illinois Central Railroad, A. S. Baldwin, chief engineer, Chicago, Ill., reported to rebuild depot recently mentioned as being burned.

Lynchburg, Va.—Southern Railway, D. W. Lum, chief engineer, Washington, D. C., contemplates erection of passenger station in Lynchburg to cost \$50,000.

Martinsville, Va.—Norfolk & Western Railway awarded contract to J. P. Pettyjohn, Lynchburg, Va., for erection of passenger station; brick; 110 feet long and 35 feet wide; granite window sills; slate roof; train shed 240 feet long; cost about \$17,000. (Recently mentioned.)

San Angelo, Texas.—Kansas City, Mexico & Orient Railway Co., W. W. Colpitts, chief engineer, U. S. & Mexican Trust Bldg., Kansas City, Mo., is preparing to erect passenger and freight station; will also build other terminal facilities.

## SCHOOLS

Abbeville, S. C.—City has voted \$20,000 of bonds to erect high-school building. Address The Mayor. (Recently incorrectly noted as Abbeville, Va.)

Albany, Texas.—City will vote May 15 on \$20,000 bond issue to purchase site and erect school building. Address The Mayor.

Alva, Okla.—City will vote April 27 on \$25,000 bond issue to erect school building. Address The Mayor.

Baltimore, Md.—State Normal School, Lafayette and Carrollton Aves., has had plans prepared by C. M. Anderson, 314 North Charles St., Baltimore, for addition to school building; one story; brick; eight classrooms; contractors estimating include A. F. West, 217 South Gilmor St.; Thos. P. Johns, 1514 Harford Ave.; J. H. Miller, 110 Dover St.; Monmonier & Sorrell, 308 Laurens St.; D. M. Andrews Company, Vickers Bldg., all of Baltimore.

Bloomington, Texas.—City has voted \$2500 of bonds to erect school building. Address The Mayor. (Recently mentioned.)

Breaux Bridge, La.—City has adopted plans for proposed school building. Address The Mayor.

Brookland, P. O. Columbia, S. C.—City has voted \$10,000 of bonds to erect school building at Brookland. Address The Mayor.

Broussard, La.—Parish of Sacred Heart Church awarded contract to August Fuessel, 2001 Virginia St., San Antonio, Texas, for erection of proposed \$12,000 school building; plans by F. B. Gaenslen, Conroy Bldg., San Antonio, Texas; brick structure; ordinary outside construction.

Brownsville, Tenn.—City will probably issue \$4000 of bonds to install steam heating plant and make other improvements to school building. Address The Mayor.

Cave Springs, Ga.—Hearne Academy has not had plans prepared for improvements recently mentioned; will erect \$15,000 dormitory with 30 to 40 rooms; improvements to present school building to cost \$5000; bids to be opened in May; J. A. Glover, treasurer.

Charleston, Ark.—Special School District will expend \$10,000 in erection of school building recently mentioned; 50x75 feet; two stories; brick; metal-shingle roof; entire interior wood-fiber plaster; ordinary construction; hot-air heat; architect and contractor, Charles Miller, Little Rock and Paris, Ark.

Cleburne, Texas.—Barrett & Roberson of Southland University, Denton, Texas, are promoting erection of \$20,000 college building.



Coffeeville, Miss.—Sealed bids will be received until May 4 by W. A. Morrison, clerk of the Board of Aldermen, for erection and completion of two-story school building at Coffeeville; plans and specifications on file at offices of P. J. Krause, architect, Meridian, Miss., or of W. A. Morrison. (Recently mentioned.)

Columbia, S. C.—University of South Carolina is planning to erect science hall to cost \$40,000.

Cullman, Ala.—City has rejected all bids and will receive new bids until April 26 for erection and completion of two-story high-school building; certified check for 3 per cent. amount of bid; plans and specifications on file at office of John Sutterer, secretary building committee, Cullman, or upon written application accompanied by certified check for \$25; separate bids for hot-air heating and ventilating systems received at same time; William A. Heck, chairman building committee.

Dumbarton, Va.—Sisters of Holy Cross, 1312 Massachusetts Ave., Washington, D. C., will erect school at Dumbarton; Italian brick, with stone trimmings; Tudor style; main building about 200 feet long; four stories; will contain classrooms, studio, parlors, reception-room, etc.; north wing chapel, assembly hall, culinary department, etc.; south wing music hall and private rooms; steel girders; fireproof; reinforced concrete floors; fire-escapes; heating plant in separate building; gymnasium; roof garden, with palm-room and enclosed sun parlor.

Durant, Okla.—Durant Presbyterian College has adopted plans by Breedlove & Miall, Ardmore, Okla., for school building recently noted; 130x258 feet; main building three stories and basement; 92x130 feet; two wings, each 50x83 feet; two stories and basement; 60 rooms, including auditorium 60x77 feet, with seating capacity of 700; roof gardens on each wing; steel stairways; cream buff face brick with white limestone trimmings; sandstone foundation; cost \$80,000.

Elizabethton, Tenn.—Carter county will erect \$25,000 high-school building in Elizabethton. Address County Commissioners.

Gainesville, Ga.—Brenau College will erect new dormitory, to accommodate 200 pupils.

Gainesville, Ga.—Riverside Military Academy will erect additions to academy.

Glenwood, P. O. Worth, Texas.—Glenwood Independent School District had plans prepared by M. L. Waller, Fort Worth, Texas, for 16-room brick school building; steam heat; bids not yet advertised; Ira T. Corlitt, secretary, 1524 Vickory Boulevard, Fort Worth.

Granite, Okla.—Granite School District building (recently mentioned) will be erected at cost of \$25,000; fireproof structure; Mission style; one-story; 85x153 feet; rubble granite and cut granite; steam heat; J. W. Ryder, president board of trustees; bids opened April 20.

Harpers Ferry, W. Va.—Storer College, Henry T. McDonald, president, will erect president's residence; plans by S. P. Humrickhouse; building of ordinary construction; steam heat; electric lighting; cost \$4000; will receive bids. Dormitory, recently reported burned, will also probably soon be rebuilt at cost of \$25,000 or more; fireproof structure; plans and specifications not yet prepared.

Henrico County, Va.—Henrico county will erect high-school building near Fulton Hill to cost \$14,000 and school building at Glen Echo to cost \$6000; W. A. Maddox, Superintendent of Schools, Richmond, Va.

Houston, Texas.—City is planning erection of annex to high-school building, to contain little gymnasium. Address The Mayor.

Itasca, Texas.—City will vote May 15 on \$35,000 bond issue to erect school building. Address The Mayor.

Kerville, Texas.—Miss Sarah C. Scofield, San Antonio, Texas, will erect concrete school building at Kerville.

Lake Arthur, La.—City has voted special tax for erection of high-school building. Address The Mayor.

Laurinburg, N. C.—City has voted \$40,000 of bonds for graded schools. Address The Mayor.

Lawton, Okla.—City will receive bids until April 28 for erection of high-school building recently mentioned; certified check for \$5000; also separate bids for plumbing, to be accompanied by certified check for \$500, and for installation of steam force blast system of heating and ventilation controlled by thermostatic regulations, halls and board and superintendent's office to have wall radiation; heating engineer to furnish everything of every description to put plant in perfect working condition, this to include all venti-

lators in attic and all galvanized iron; heat and ventilator risers to be galvanized iron, as well as curtain walls; heating contractor to submit his proposal, complete plans and specifications for his work; all plans and specifications on file at offices of Hair & Smith, architects, Binns Bldg., Oklahoma City, Okla., or of A. J. Burton, clerk of board, Lawton, or can be had on deposit of certified checks of \$100 for plans for construction, \$25 each for plumbing and heating and ventilating.

Lewisville, Texas.—City has voted \$7000 of bonds for erection of school building. Address The Mayor.

Lillian, Texas.—City will vote May 1 on \$6000 bond issue to erect school building. Address The Mayor.

Martinsville, Va.—City will erect high-school annex recently noted; to contain assembly hall, two classrooms and gymnasium; addition 50x70 feet; two stories; construction probably under supervision of engineer; to be completed by fall school opening; J. R. Gregory, division superintendent.

Moberly, Mo.—City will vote on \$52,000 bond issue to erect \$40,000 high school and \$12,000 ward school building. Address The Mayor.

Notch Cliff (not a postoffice), Md.—Sisters of Notre Dame, postoffice Roland Park, Md., railroad station, Notre Dame, Md., previously noted awarding contract to Piel Construction Co., Builders' Exchange, Charles and Lexington Sts., Baltimore, will erect main structure three stories, flanked with two smaller building each side; ornamental frame; mill construction; foundation and one story heavy bluestone; 260x105 feet; broad porches and verandas of white pine kott columns, turned with ontas built entirely around building; interior finished in concrete and ornamental hardwood; Gothic style chapel in rear.

Odessa, Texas.—Bids will be received at the courthouse, Odessa, until May 3 for erection of eight-room school building; brick and concrete; certified check for \$400; plans and specifications on file at Citizens' National Bank, Odessa, and at office of Walter E. Taylor, architect, Continental Bank Bldg., Fort Worth, Texas.

Pocahontas, Va.—Tazewell county school building, recently mentioned, will be brick structure with eight rooms, 20x30 feet; two stories; gravity system steam heat; electric lighting; cost \$30,000; plans by C. L. & W. E. Shuffelbarger, Bluefield, W. Va.; J. D. Lawford, chairman building committee.

Rockwood, Tenn.—City will vote May 15 on \$28,000 bond issue for school and street improvements. Address The Mayor.

Rotan, Texas.—City has voted \$18,000 of bonds to erect school building. Address The Mayor.

Rutherford, Tenn.—City awarded contract at \$12,000 to N. B. & L. E. Rooks, Humboldt, Tenn., for erection of addition to school building.

Shaw, Miss.—City awarded contract to Shaw Hardware & Lumber Co., Shaw, for erection of proposed school building; brick; one story; 44x74 feet; mill construction; electric lighting; cost \$7000; plans by Geo. F. Barber, Knoxville, Tenn.

Snyder, Texas.—City will vote on \$25,000 bond issue to erect two school buildings. Address The Mayor.

Sour Lake, Texas.—City will vote on \$10,000 bond issue to erect school building. Address The Mayor.

Springfield, Mo.—City will vote May 11 on \$125,000 bond issue to erect industrial high school. Address The Mayor.

St. Augustine, Fla.—Bids for masons' and carpenters' work for construction of superstructure for St. John's county school will be received until April 26; certified check for 3 per cent. amount of bid; plans and specifications on file at office of Robinson & Reidy, architects, St. Augustine, or will be forwarded by express upon written or telegraphed application; bids in plain sealed envelopes addressed to W. S. M. Pinkham, superintendent and secretary Board of Public Instruction, St. Augustine; work to be furnished by organized labor.

Stillwater, Okla.—Agricultural and Mechanical College awarded contract at \$83,687 for erection of buildings recently mentioned; boys' dormitory, 38x132 feet; three stories; women's building, including dormitory, 76x148 feet; freight elevator; vacuum steam heat in both buildings and lighted by central plant.

St. Louis, Mo.—St. Mark's Church, Rev. Peter J. O'Rourke, pastor, has had plans prepared by Baker & Knell, St. Louis, for proposed school building; three stories and basement; Gothic style; gray brick, with

red-tile roof; fireproof; 92x163 feet; basement will contain chapel for children; gymnasium, 58x93 feet; swimming pool, 25x35 feet, etc.; first floor, 10 classrooms, 20x26 feet each; second floor, assembly hall or theater, 94x78 feet, including stage and dressing-rooms; third floor, sodality chapel, 29x71 feet, and two classrooms; heat from central boiler plant; cost \$125,000.

Sulphur, Okla.—City will vote on \$56,000 bond issue to erect high-school building and \$4000 to erect ward-school building. Address The Mayor.

Timpson, Texas.—City will vote May 15 on \$9000 bond issue to erect addition to school building. Address The Mayor.

University, Miss.—University of Mississippi will erect \$50,000 library building.

Vernon, Texas.—City awarded contract to John A. White, Vernon, for erection of \$15,000 high-school building.

Waleska, Ga.—Reinhardt College, R. C. Sharp, president, is planning to erect boys' dormitory.

Washington, D. C.—James A. Dunn, 1324 5th St. N. W., at \$55,600, is lowest bidder for erection of proposed school building on School street.

Waurika, Okla.—Sealed bids will be received until August 26 for erection of 12-room brick school building at Waurika; plans and specifications on file at office of C. M. Easterling, Director of School Board; C. L. Ford, Clerk; has voted \$35,000 bonds.

Wichita Falls, Texas.—City will vote May 18 on \$60,000 bond issue to erect school buildings. Address The Mayor. (Recently mentioned.)

Yokum, Texas.—City awarded contract to Bailey Mills Co., Victoria, Texas, for erection of school building recently mentioned; two stories; brick and stone; cost \$32,000.

## THEATERS

Baltimore, Md.—Ward & Viola awarded contract to American Contracting Co., American Bldg., Baltimore, for erection of moving-picture theater at 310 South Broadway, to cost \$6000. E. A. Moller, 1617 Harlem Ave., Baltimore, prepared plans.

Kansas City, Mo.—Leo N. Leslie leased auditorium of synagogue and will sublet to company that will operate moving-picture theater; will expend \$15,000 for remodeling.

St. Louis, Mo.—William H. Miltenberger, Vital W. Garesche and Samuel Brendon have organized Consolidation Construction & Amusement Co. to erect moving-picture theaters in St. Louis and all large cities in the State.

St. Louis, Mo.—Fred Kohrenberg purchased site 60x127 feet on which to erect theater; three stories; seating capacity 1500; cost \$35,000.

St. Louis, Mo.—Eugene and Harry Freund purchased site, 48x125 feet, on which to erect moving-picture theater to cost \$3000.

Tallulah, La.—Tallulah Social and Literary Club organized with \$2500 capital stock to erect opera-house. A. J. Sevier, Jr., is president; will have plans prepared by J. Y. Snyder, Shreveport, La., for 30x100-foot frame amusement and entertainment hall, to cost \$2500; acetylene-gas lighting; construction probably by days' work, superintended by committee.

Tulsa, Okla.—George B. Thompson will erect theater.

## WAREHOUSES

Augusta, Ga.—Atlantic States Warehouse Co. will add compartments to warehouse to provide 15,000-bale additional cotton-storage capacity. (See "Cotton Compresses and Gins.")

Baltimore, Md.—Standard Oil Co., Baltimore office, Maryland Trust Bldg., awarded contract to Wm. Ferguson & Bro., 214 Clay St., for erection of warehouse on Pier 2; six stories; fireproof; brick exterior walls; structural work of steel, with concrete floor arches and terra-cotta partitions; first two floors will be devoted to storage and warehouse purposes, and four upper stories to offices; cost \$100,000; plans by Haskell & Barnes, 406 Wilson Bldg., Baltimore. (Recently noted.)

Baltimore, Md.—Alexander H. Spengemann of Spengemann Bros., 304-308 North Central avenue, will erect warehouse and shed on North Central avenue; one story; brick; 50x100 feet; foundation of stone and reinforced concrete; mill construction; plans by Geo. C. Roff.

Baltimore, Md.—Baltimore & Ohio Railroad, J. E. Greiner, consulting engineer, Baltimore, has distributed plans for estimates on erection of proposed produce warehouse to be built at Sharp, Howard and Lee

streets; frontage on Lee street 275 feet and on Sharp street 53 feet; Lee-street front will extend to depth of 96 feet and will be two stories high, of brick construction, and will be used as general offices; balance of building will be one story high, of standard B. & O. warehouse construction, and will be equipped with devices for handling produce from trains and wagons; remainder of company's property for yard purposes; expenditure \$40,000. Following contractors are invited to bid: Edward Brady & Son, Cathedral and Howard Sts.; J. J. Walsh & Son, 1525 Maryland Ave.; John Waters, 23 East Center St.; John Hiltz & Sons Company, rear 3 Clay St.; John E. Marshall & Son, 121 Mercer St., all of Baltimore; Roydhouse, Arey & Co.; P. Farrell and J. E. & A. L. Pennoch, all of Philadelphia, Pa.; James Stewart & Co. of New York and C. B. Swift Company of Chicago; plans prepared by M. A. Long, 6 Elmhurst road, Baltimore, and are on file at Builders' Exchange, Charles and Lexington Sts.

Baltimore, Md.—Lewis Baer & Co., 222 Light St., awarded contract to National Fireproofing Co., Charles A. Hammett, manager, Colorado Bldg., Washington, D. C., for erection of warehouse at Stump alley and Conway street.

Houston, Texas.—Blaine Hardware Co. will erect annex to building of Schuhmacher Grocery Co.; addition to be 50x135 feet; three stories and basement; will also provide private concrete wharf with stiff-leg derrick equipment.

Houston, Texas.—The Texas Company will, it is reported, erect warehouse. (See "Miscellaneous Construction Work.")

Houston, Texas.—Schumacher Grocery Co. awarded contract to John Stadler of Houston for erection of warehouse; 100x160 feet; three stories, with basement and sub-basement; slow-burning mill construction; exterior walls of brick; concrete foundation; composition roof; two electric freight elevators; gravity barrel and package lifts; facilities for loading and unloading from boats on channel in rear of building and switch tracks in front for loading and unloading of freight cars; standpipes, with hose, on each floor and sprinkler system; cost \$75,000. (Recently mentioned.)

Jonesboro, Ark.—Gay Oil Co. will erect warehouse.

Kansas City, Mo.—Robert Keith Furniture & Carpet Co. purchased site 66x160 feet for \$16,000 on which to erect warehouse, factory and repair shop.

Latta, S. C.—J. S. Bethes, L. H. Smith, R. J. Dew and others will erect tobacco warehouse 120x86 feet; corrugated iron; fireproof; cost \$5000 to \$8000; contract awarded J. E. Delbier of Latta.

Lexington, Ky.—Silas Shelburne & Son will erect tobacco warehouse; 118x200 feet; will extend back 200 feet to present building, which is being extended to branch near railroad, making entire structure about 400 feet long; about one-half length of building will be 150 feet wide; handling capacity about 500,000 pounds of tobacco daily; shed will also be erected to hold 150 loads of tobacco; electric power plant will be installed in basement to furnish power to operate tobacco-handling machinery; remainder of basement will be divided into 250 stalls for planters' horses. (Recently mentioned.)

New Orleans, La.—M. D. Levy, Grand Cotton, La., awarded contract to Wm. T. Nolan, 310 Hennen Bldg., New Orleans, for erection of three-story pressed-brick store and warehouse; ordinary construction; electric lighting; Otis hand elevator; cost \$8500; plans by contractor.

Norfolk, Va.—Norfolk & Southern Railway awarded contract for erection of warehouse and office building to West Richardson, 404 Seaboard Bank Bldg., Norfolk, recently noted as lowest bidder. (See "Bank and Office Buildings.")

Ocala, Fla.—George H. Ford interested in plan to build corn warehouse; equipment to include machinery for shucking, shelling and sacking. (See "Machinery Wanted.")

Statesboro, Ga.—Farmers' Union of Bulloch County will receive bids until April 24 for proposed cotton warehouse; brick; 80x100 feet.

Thomasville, Ga.—Farmers' Union will erect warehouse to cost \$5000.

Winston-Salem, N. C.—R. B. Horn and J. H. Hill will erect leaf-tobacco warehouse.

## Thomas B. Whitted & Co.

Thomas B. Whitted & Co. announce their removal to new offices in the Realty Building, Charlotte, N. C. They are contracting engineers for high-grade power-plant equipment, machinery for mills, railway power and light systems, etc.

## RAILROAD CONSTRUCTION

## RAILWAYS

Altus, Okla.—The Wichita Falls & Northwestern Railway, it is reported, contemplates an extension from Frederick to Altus, Okla. Frank Kell of Wichita Falls, Texas, is vice-president and general manager.

Artemus, Ky.—An officer of the Cumberland Northern Railroad Co., recently incorporated, is reported as saying that surveys are in progress and construction will begin on the proposed line from Artemus to Beattyville, Ky., 75 miles, as soon as they are completed.

Asheville, N. C.—W. J. Oliver of Knoxville has, it is reported, been instructed by the Southern Railway to resume work on double track from Asheville to Craggy, which includes a large concrete viaduct and a steel bridge. J. C. Monday & Co. are subcontractors.

Atlanta, Ga.—J. L. Murphy, secretary of the Atlanta Northeastern Railroad Co., is quoted as saying that it is proposed to begin work this summer on the projected line from Atlanta to Roswell, Alpharetta and Cumming, Ga., 47 miles. M. Mason of Atlanta is chief engineer. J. P. Brooke of Alpharetta is president. Headquarters of the company, Candler Building, Atlanta, Ga.

Augusta, Ga.—The Augusta Southern Railroad, it is reported, has begun construction on the revision of line near Keysville. J. Respass is engineer in charge.

Augusta, Ga.—James U. Jackson is reported as saying that improvements are to be made on the railway in Augusta and also on the line from Augusta to Aiken, which latter includes revision.

Bartlesville, Okla.—The Cherryvale, Oklahoma & Texas Railway Co., incorporated several years ago, has, it is reported, financed its plan abroad and survey will begin soon. J. H. Brewster of Independence, Kans., is chief engineer. S. M. Porter of Caney, Kans., is president.

Baton Rouge, La.—The Southern Pacific. It is reported, has resumed construction near Gros-Tete on the cut-off line from Baton Rouge to Lafayette, La. Construction will also soon begin on the inclines at Fort Allen, opposite Baton Rouge. A. V. Kellogg is engineer maintenance of way at Houston, Texas.

Birmingham, Ala.—The Illinois Central Railroad, it is reported, will build a spur from Thomas to connect with the Southern Railway at North Birmingham, between one and a half and two miles. A. S. Baldwin of Chicago is chief engineer. Side tracks are also to be built.

Birmingham, Ala.—Reported that the Central of Georgia Railway has let contract to Hill Bros. for a spur to the Standard Portland Cement Co.'s plant at Leeds.

Cabin Creek, W. Va.—C. K. McDermott of Charleston, W. Va., is reported to be promoting a plan for an electric railway between Cabin Creek and Boomer, W. Va.

Cambridge, Md.—Reported that the Peninsula Transportation Co., which proposes to build an electric railway from Claiborne to Ocean City, Md., about 85 miles, and from Cambridge, Md., to Seaford, Del., will begin construction early this summer. The McCay Engineering Co. of Baltimore, represented by H. Kent McCay, has made surveys for the line, the backers of which are not yet disclosed.

Carthage, Tenn.—Reported that the Tennessee Central Railroad contemplates building an extension of about 100 miles to Tompkinsville and Hodgenville, Ky. Another report intimates that the proposed line which would connect with the Illinois Central Railroad at Hodgenville will be built by the latter company. L. F. Lonnbladh is chief engineer of the Tennessee Central at Nashville, Tenn., and A. S. Baldwin is chief engineer of the Illinois Central at Chicago, Ill.

Center, Texas.—Tracklaying has begun on the Santa Fe extension from Center to Zuber, Texas, about 21 miles.

Chapin, Texas.—The San Antonio & Rio Grande Railroad Co. is reported to have completed 11 miles of line from Ebenezer to Chapin, and now contemplates extending from Chapin to Falfurrias, Texas. D. B. Chapin and others are interested.

Cookeville, Tenn.—The Tennessee, Alabama & Kentucky Railway Co. has been chartered to build a line from Louisville to Chattanooga. This is the road previously reported as projected by Rutledge Smith of Cookeville, Tenn., whose name heads the list of incorporators. He is quoted as saying that it is first proposed to build north from the coal fields of Van Buren county, via Sparta

and Cookeville, to the Cumberland River at either Gainesboro or Celina. A preliminary survey will be made by R. J. Moscrip. Eastern capital is interested. The other incorporators are R. L. Farley and O. K. Holladay of Cookeville, S. B. Anderson of Celina and J. N. Cox of Gainesboro, Tenn. Headquarters will be at Cookeville, and Mr. Smith will be president.

Dallas, Texas.—Ben B. Cain, vice-president and general manager of the Gulf, Texas & Western Railway Co., writes the Manufacturers' Record that a contract has been awarded for the second 20 miles of construction to D. J. Grigsby of Dallas, Texas, who has the contract to build the first 20 miles of line, which extends from Jacksboro, Texas, northwest. John T. Witt of Jacksboro is chief engineer in charge of construction.

Dekalb, Miss.—President Sam O. Bell of the Sanoddy Valley Railroad is reported as saying that all but half a mile of grading is finished on this line, which runs from Dekalb to Sucarnochee, 12 miles, connecting with the Mobile & Ohio Railroad. It is to be in operation by June.

De Queen, Ark.—The Choctaw Lumber Co. is reported to have completed three miles of grade and 12 miles of permanent survey on its railroad between De Queen, Ark., and Vallant, Okla.

Dyersburg, Tenn.—S. G. Latta and E. Rice of Dyersburg are reported to be working on the plan to extend the Dyersburg Northern Railroad from Tiptonville to Hickman, Ky., and thence to a connection with the Mobile & Ohio Railroad near Cayce, Ky.

Earlington, Ky.—The Louisville & Nashville Railroad Co., it is reported, has made surveys for a cut-off from Morton's Gap running east of Earlington and Madisonville and connecting again with the old line north of the latter place. W. H. Courtenay is chief engineer at Louisville, Ky.

El Paso, Texas.—W. B. Latta is quoted as saying that preliminary arrangements are being made to begin construction on the El Paso & Fort Hancock Electric Railway from El Paso to Fabens, 32 miles. The line between El Paso and Yaleta will be undertaken first. C. N. Bassett is president, Felix Martinez vice-president, Thomas O'Keefe secretary and W. Cooley treasurer, all at El Paso.

El Reno, Okla.—J. W. Maney of El Reno is reported as saying that construction has begun on the interurban railway between El Reno and Oklahoma City.

Eufaula, Ala.—Col. R. D. Thomas, E. P. Thomas and others are reported to be promoting plans to build the Birmingham, Eufaula & St. Andrews Bay Railroad, and charter will be applied for.

Excelsior Springs, Mo.—W. A. Bell is reported to have sold to Henry J. Arnold of Denver, Col., control of the proposed Excelsior Springs & Suburban Railway between Excelsior Springs and a connection with the Chicago, Milwaukee & St. Paul Railway, 2½ miles.

Fitzgerald, Ga.—Official: Construction of the Fitzgerald & Ocella Electric Railway will begin about May 1, the line to be 12 miles long. Bonds authorized, \$250,000. S. Tilden Holtzendorff is president at 61 Fifth Ave., New York city; D. B. Jay is vice-president and C. A. Holtzendorff is secretary and treasurer, both at Fitzgerald, Ga. James R. Turner is legal and financial agent at 37 Wall St., New York city. Jay & Jay are local counsel at Fitzgerald, Ga. The name of the company is Fitzgerald & Ocella Electric Railway & Power Co.

Gainesville, Texas.—Reported that the Gainesville, Whitesboro & Sherman Electric Railway Co. will let construction contracts for its proposed line about May 1. John King of Gainesville and others are interested.

Gassaway, W. Va.—The Coal & Coke Railway, it is reported, has let contract to Lamb & Tully for the proposed branch from Gassaway to Sutton, eight miles. It is reported that the branch will be extended along Elk River to Holly Junction, connecting with the Baltimore & Ohio and West Virginia Midland railroads. R. H. Pembroke is chief engineer at Elkins, W. Va.

Goldstoro, N. C.—The Goldsboro Traction Co., it is reported, contemplates an extension to Swan Springs and Whitehall, 16 miles. E. T. Oliver of Raleigh, N. C., is president and general manager. J. S. Oliver of Goldsboro is secretary and treasurer.

Grafton, W. Va.—An officer of the Baltimore & Ohio Railroad denies the report that the company will revise the line at Grafton. The bridge east of Grafton will be rebuilt.

Graham, Texas.—The Chicago, Rock Island & Gulf Railway is reported to have completed survey from Graham to Stamford,

Texas, and the engineers are now working back from Stamford to Graham perfecting the route. C. M. Case is chief engineer at Fort Worth, Texas.

Greenville, Tenn.—Mr. P. C. Ottinger of Knoxville informs the Manufacturers' Record that he is securing rights of way for an electric railway between Greenville and Newport, Tenn., to be built by New York capitalists.

Guthrie, Okla.—John W. Shartel of Oklahoma City is reported conferring with H. M. Daugherty of Columbus, Ohio, to secure construction of an interurban railway between Guthrie and Norman, Okla. He is vice-president of the Oklahoma Railway.

Henderson, Texas.—Reported that the Timpson & Northwestern Railway Co. has consented to extend its line from Pine Hill to Henderson, 20 miles, under the name of the Timpson, Henderson & Northwestern Railroad. Construction is reported already begun. W. G. Ragley of Timpson, Texas, is president of the former.

Hickman, Ky.—The Nashville, Chattanooga & St. Louis Railway is reported surveying for a change of line into Hickman. Hunter McDonald is chief engineer at Nashville, Tenn.

Hinton, W. Va.—An officer of the Virginian Railway, in a letter to the Manufacturers' Record, denies the press report that the company contemplates building a line from Hinton to connect with the main line near Lynchburg, also a line from Matoaka to the Big Blue River, also a branch from the mouth of the Big Blue Stone to Glade.

Humboldt, Tenn.—The Missouri, Tennessee & Georgia Railroad Co. is reported to have again taken up the plan to build an electric railway from Humboldt, via Crockett Mills, Friendship and Boncord, to Dyersburg, Tenn., 35 miles. Capital \$1,000,000. I. H. Dungan is president and general manager; C. H. Ferrell, vice-president; O. C. Sharp, treasurer, all at Humboldt.

Jellico, Tenn.—The Southern Railway is reported to have begun survey for a line from Jellico Creek to a connection with the Cincinnati Southern Railway. W. H. Wells, Washington, D. C., is chief engineer.

Kansas City, Mo.—Official: The Kansas City, Mexico & Orient Railway Co. is preparing to build its extension from Sweetwater to San Angelo, Texas, 78 miles. The work will be principally tracklaying and building bridges. The grading is completed. W. W. Colpitts is chief engineer at Kansas City, Mo.

Kansas City, Mo.—An officer of the Missouri Pacific Railway writes the Manufacturers' Record denying the press report that the main line from Kansas City to Pueblo would be rebuilt. He says it is not contemplated at present.

Kansas City, Mo.—President M. M. Sweetman of the Blue Valley Traction Co. writes the Manufacturers' Record that the line to be built is from a point near the intersection of 15th street with the Blue River southward in Blue River Valley via Leeds to Swope Park, and east from the park to Raytown. W. H. Smith, engineer, is completing survey and working on details of construction, but is not yet ready to receive bids. The other officers are U. S. Epperson, vice-president; J. M. Lowe, treasurer; C. W. German, secretary. All the officers are directors, the other board members being W. S. Dickey, C. C. Craver, Sam T. McDermott, B. B. Joffe and H. M. Dixon. Office in the American Bank Building, Kansas City, Mo.

Kansas City, Mo.—The Missouri Pacific, it is reported, will immediately resume construction on the Edgewater Terminal Railway at Kansas City. L. J. Smith has the grading contract.

Laurinburg, N. C.—An officer of the Laurinburg & Southern Railroad, in a letter to the Manufacturers' Record, confirms the report that the route has been changed from Laurinburg to Johns Station, on the Atlantic Coast line, instead of to Gibson. Grading is under way and is expected to be completed by July 1. Survey is being made for a proposed extension to Wagrain, N. C., about 12 miles. Baxter Morrison is in charge of construction.

Pine Bluff, Ark.—Steps are being taken to begin construction of the Pine Bluff North & South Railroad from Pine Bluff to either Lonoke or DeWalls Bluff. Surveys have been made. Thomas A. Bell of St. Louis is reported conferring with the promoters preparatory to beginning work.

Lawton, Okla.—The Manufacturers' Record is informed that T. H. Lindley, president of the Lindley-Kirkes Construction Co. of Oklahoma City, has acquired a large interest in the Lawton, Wichita Falls & Northwestern Railway Co., and says that as soon

as arrangements are made to float the bonds the line will be completed into Lawton. The construction contract for the entire line has been let to this company, as has the contract for tracklaying for the 10 miles already graded.

Louisville, Ky.—The Cincinnati, Louisville, Lexington & Maysville Traction Co., capital \$10,000,000, has filed incorporation articles at Frankfort. W. T. S. Blackburn of Dry Ridge, Grant county, Kentucky, is president, and he is reported as saying that construction will be started this year and rushed to completion. It is proposed to build an electric railway between Cincinnati and Lexington, also between Maysville and Louisville, the two lines crossing at Dry Ridge. The system will be about 250 miles long. It will traverse 19 or 20 counties, and will touch several towns which have no rail facilities. The other officers are: Vice-president, J. Glascock of Williamstown, Ky.; secretary, John McCoy; treasurer, Kate Martin, the last two being of Dry Ridge, Ky. The other stockholders are J. Duval and Perry Simpson of Dry Ridge; Addie B. Atkins of Sherman, Ky.; John J. Blackburn of Hanks, Ky.; George McMillen of Butler, Ky., and S. M. Billiter of Williamstown, Ky. President Blackburn holds 1010 shares and the rest 10 shares each. Engineers have been engaged to make survey.

Lynchburg, Va.—The E. G. Nave Bros. Co. of Portsmouth, Ohio, is reported to have been given the subcontract on the Lynchburg cutoff of the Southern Railway. This includes all work except two bridges and a tunnel.

Minden, La.—Official: The Louisiana & Arkansas Railway Co. has bought terminal property in Shreveport, to which point the line is being built. About 11 miles are already nearly complete, most of it having been built by the former Minden East & West Railway. Contract for the remainder was let on April 10 to M. Tansy. It will probably be completed by October.

Mobile, Ala.—Reported that a company will be organized to take over the terminals of the Mobile, Jackson & Kansas City Railroad Co. and build warehouses, piers, docks and other improvements, costing more than \$500,000. H. W. Bell is engineer at Laurel, Miss. W. F. Owen is general manager at Mobile, Ala.

Muskogee, Okla.—Official: While the Missouri, Kansas & Texas Railway Co. has made plans and estimates for lowering the track through Muskogee, it does not contemplate beginning work within 60 days. It will be some time before it will begin. S. B. Fisher is chief engineer at St. Louis, Mo.

Nashville, Tenn.—Mr. Lee Guggenheim, president and general manager, informs the Manufacturers' Record that the Nashville & Crocker Springs Rapid Transit Railway has been incorporated by himself and W. F. Webb, vice-president; R. B. Jones, secretary; J. A. Witherspoon, James B. Carr, Frank D. Marr, F. Roddy and W. W. Morehead. Line will be about 12 miles long, from Nashville to Crocker Springs. Surveys will be made and contracts let within 30 days.

Nashville, Tenn.—The Nashville & Crocker Springs Rapid Transit Co. has been chartered with \$50,000 capital to build an electric railway from Nashville to Crocker Springs, 12 miles. Construction is to begin within 30 days. The incorporators are Lee Guggenheim, W. F. Webb, J. A. Witherspoon, R. B. Jones, James B. Carr, Frank B. Marr, F. Roddy and W. W. Morehead.

Ochiltree, Texas.—Reported that survey has begun in Oklahoma for the Enid, Ochiltree & Western Railroad, on which construction is under way at Dalhart, Texas. H. S. Moreland and Frank Hamilton are the engineers.

Paris, Ark.—Reported that tracklaying is under way on the line of the Paris & Subaco Traction Co., six miles long.

Peterstown, W. Va.—Mr. W. H. Ballard of Peterstown writes the Manufacturers' Record that the proposed railroad is to be about 3½ miles long, from Rich Creek, on the Virginian Railway, to Peterstown. It is only a local enterprise.

Port Barre, La.—Reported that R. N. Sims of Donaldville, La., has been granted permission to build a tramway over the levee at Port Barre.

Rockdale, Texas.—The Manufacturers' Record is informed that the Rockdale-Florence Interurban Railway Co., with headquarters at Rockdale, contemplates building 60 miles of interurban railway. H. C. Meyer of Rockdale is president. Stock is reported subscribed and survey to begin soon.

Rusk, Texas.—A bill has been introduced in the Legislature authorizing an extension of 100 miles to the State Railroad between



Rusk and Palestine, Texas. The State Penitentiary Board at Austin, Texas, has charge of the line.

Salisbury, N. C.—The Salisbury Railway Co. is the name of the corporation chartered to build the proposed line from Winston-Salem, via Spencer, Salisbury and Concord, to Monroe, N. C., 115 miles. Among those mentioned as interested are J. T. Jerome of Salisbury; G. E. Webb, F. S. Varney and others of Winston-Salem, besides residents of Concord, Spencer, Mount Pleasant, Faith and Monroe.

Sanford, N. C.—The Sanford & Glendon Railroad Co. has been organized under the recent charter. Survey is to begin immediately for the line, which is to connect the Durham & Charlotte Railway with the Seaboard Air Line and the Atlantic Coast Line. The directors are: President, John B. Lennig; vice-president, John T. Crankshaw, both of Philadelphia, Pa.; secretary, John Tull of Elise, N. C.; John H. Kennedy of Gulf, N. C.; John H. Glover and William H. Carnell of Philadelphia, Pa. M. A. Bender, also of Philadelphia, is treasurer.

Sanford, Fla.—Construction has begun in Sanford on the railroad which is to connect with the Sanford & Everglades Railroad to Cameron City, Fla., eight miles. This was erroneously reported last week as of North Carolina.

Sapulpa, Okla.—An official is reported as saying that the Sapulpa & Interurban Railway Co., which proposes to build from Sapulpa to Kiefer and Glen Pool, on the Midland Valley Railroad, about 10 miles, has let the grading contract to Patrick McNeerney of Sapulpa and contract for the bridges to the Kansas City Bridge Co. of Kansas City, Mo. It is also reported that five miles additional will be built in and near Sapulpa, also an extension of three miles to Tanneha. Survey is made and right of way secured. H. E. Clark of Glen Campbell, Pa., is president and D. W. Patton of Sapulpa, Okla., is chief engineer.

Talladega, Ala.—The Alabama Power Development Co. is reported, proposes to build an electric railway from Talladega to the "Shoals," nine miles, and from there to Lincoln and the Coosa River below Greensport.

Tampa, Fla.—P. S. Arkwright, vice-president of the Tampa Northern Railroad, is reported as saying that the proposed extension from Brooksville to Dunellon will be made as soon as possible. John Pasco is chief engineer at Tampa.

Tulsa, Okla.—Mr. A. A. Small, 9 East 3d St., Tulsa, Okla., writes the Manufacturers' Record confirming the report that the Oklahoma Union Traction Co. has been incorporated, as recently reported.

Uvalde, Texas.—Reported that the Uvalde & Crystal City Railway Co. is being organized and will apply for a charter to build a line 50 miles long between the two points named. A. R. Ponder of San Antonio is president; James A. Weir of Uvalde is secretary, the other directors being Hal L. Howard and Isaac T. Pryor of San Antonio.

Victoria, Texas.—An officer of the St. Louis, Brownsville & Mexico Railway, in a letter to the Manufacturers' Record, denies the press report that the company contemplates building a line from Bloomington to Victoria.

Vinegar Bend, Ala.—The amended charter of the Alabama & Mississippi Railroad in Mississippi (into which State the line extends) has been approved providing for an extension from Leakeville to the Mississippi Sound at or near Pascagoula, Miss. N. E. Turner is president at Vinegar Bend, Ala.

Wade, Fla.—The Seaboard Air Line, it is reported, contemplates building a branch about 15 miles long, starting from a point about four miles west of Wade, the object being to develop phosphate mines. W. L. Seddon is chief engineer at Portsmouth, Va.

Water Valley, Miss.—Chester H. Pond of Moorehead, Miss., is reported organizing a railroad company to build a line about 40 miles long from Water Valley to Calhoun City, Miss.

Weston, W. Va.—George I. Keener is reported as saying that arrangements are being made to begin construction within a few weeks on the electric railway between Weston and Bendale, W. Va., in which he is interested.

West Point, Miss.—Mr. J. M. Hardison informs the Manufacturers' Record that the West Point & Houston Railway Co. has organized temporarily and charter has been applied for. The route is from West Point to Houston, Miss., 30 miles.

Wheeling, W. Va.—The Rapid Transit Railway Co. is to meet on May 6 to organize. The incorporators, as previously reported,

are Albert M. Schenk, Edward W. Stifel, J. D. Merriman, J. R. Kommer and A. S. List.

Wheeling, W. Va.—The Wheeling & Uniontown Railroad Co., recently chartered, is to meet for organization on May 3 at the office of Noyes & Ritz, 1110 and 1111 Schmuldach Bldg., in Wheeling. S. M. Noyes, J. M. Ritz, A. B. Woodruff, Randolph Hix and L. C. Ebeling are the incorporators.

Wichita Falls, Texas.—The Chamber of Commerce of Wichita Falls has, it is reported, been authorized by citizens to offer a bonus of \$75,000 to the Oklahoma City Chamber of Commerce to secure the building of a railroad from there to Wichita Falls.

### STREET RAILWAYS

Clinton, Okla.—Mr. M. L. Holcomb writes the Manufacturers' Record confirming the report that the Clinton Street Railway Co. and the Clinton Railway Construction Co. have been incorporated by him and others, the former to build a line and operate it and the latter to do the actual work. Ultimately it may be extended into the country. The directors are M. L. Holcomb, C. W. Goodwin, R. O. Hunt, E. A. Humphrey, C. H. Lamb, E. N. Tittsworth, A. N. Curry and B. M. Little, all of Clinton, Okla., and H. Smith of Arapahoe, Okla.

Gainesville, Ga.—Reported that Col. T. G. Dorough of Elberton, who is interested in real estate development in Gainesville, proposes to build a street car line if franchises are granted, motor cars to be used.

Hattiesburg, Miss.—A. M. Hewes, contractor, Monadnock Bldg., Chicago, informs the Manufacturers' Record that he has contract to build half a mile of new track, 14 railroad crossings, about six miles of overhead electrical construction and a new power station, with equipment, for the Hattiesburg Traction Co. R. A. Pratt is engineer in charge. This disposes of the report that the Electrical Installation Co. had the contract.

Johnson City, Tenn.—The Johnson City Traction Co., it is reported, proposes to build an extension one mile and a half long. Amzi Smith is secretary and general manager.

Washington, N. C.—Official: Four miles of electric street railway are being built by the Washington Investment Co., of which W. E. Jones is president and general manager. Contract for building and equipment has been let and actual construction is to begin April 20, to be completed by August 1. F. P. Massey is engineer in charge.

Wheeling, W. Va.—The Panhandle Traction Co. contemplates building a double track between Glenova and the Richland coal works. G. O. Nagle is general manager.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.**

Acid, etc.—Armitage Manufacturing Co., 3200 Williamsburg Ave., Richmond, Va., wants carload prices on acid and sulphate of ammonia.

Air Compressor.—A. V. Kaiser & Co., 739 Drexel Bldg., Philadelphia, Pa., in market for second-hand air compressor giving approximately 3500 cubic feet of free air per minute at 40 to 50 pounds air pressure, running at a speed of approximately 75 to 100 R. P. M. and at 125 pounds steam pressure.

Air Compressor.—Wayne Coal Co., Harriman, Tenn., wants new or second-hand air compressor to operate 12 coal-punching machines; delivery Stearns, Ky. Give prices first letter.

Aluminum, etc.—Oklahoma Specialty Printing Co., 718 North Broadway, Oklahoma City, Okla., wants to correspond with manufacturers of and dealers in jobbing sheet aluminum in satin and plain finish; also other products for printing and manufacture of advertising novelties.

Ammonia.—See "Acid, etc."

Automobiles.—Fred A. Bishop, 703 Peters Bldg., Atlanta, Ga., wants prices on gasoline

motors, 40 to 60 horse-power; also on transmissions and differentials, 40 to 60 horse-power, for commercial use; also on hubs and bearings for three-ton trucks.

Automobiles.—L. R. T. Dixon, Crisfield, Md., wants second-hand automobile for 20 or more passengers and freight.

Bakery Machinery.—S. Spigel, Inc., 229 County St., Portsmouth, Va., wants prices on dough-mixers and other machinery.

Bakery Machinery.—Beverly H. Griffith, 71 South Pryor St., Atlanta, Ga., wants quotations on second-hand dough divider, molder, brake and three-barrel mixer.

Beltting.—See "Leather."

Boiler.—See "Ice Machinery" and "Cotton Gin."

Boilers.—See "Engines and Boilers."

Boiler.—F. D. McMillan, 20 West 15th St., Atlanta, Ga., wants estimate on 30-horse-power full-arch front return tubular boiler.

Boiler.—Wayne Coal Co., Harriman, Tenn., wants 100-horse-power tubular boiler complete; new or second-hand; delivery Stearns, Ky. Give prices first letter.

Boilers.—Columbus Bierce, 1508 Tennessee Trust Bldg., Memphis, Tenn., wants two second-hand high-pressure horizontal tubular boilers, 72 inches in diameter, 18 feet long or larger; must pass Hartford inspection, allowing 125 pounds working pressure; give price, maker's name, age, condition and point of shipment.

Brass Foundry.—S. C. Littlefield, Jr., Jacksonville, Fla., wants to correspond relative to placing order for manufacture of patent propeller.

Bricks.—Dover Lumber & Milling Co., Dover, Del., wants 50,000 arch bricks.

Bridge Construction.—Supervisors of York and Cherokee counties, South Carolina, will receive bids May 6 for steel bridge over Broad River above Smith's Ford; plans and specifications on file at office of Supervisor at Gaffney, S. C., and Yorkville, S. C.; and County Engineer's office, Rock Hill, S. C.; certified check, \$1000; letting at bridge site; C. F. Gordon, Supervisor, Gaffney, S. C.

Bridge Construction.—Bids will be received at office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., until April 23 for construction of steel bridge 140 feet in Fluvanna county, also reinforced concrete bridge, 20-foot span, in Warwick county; certified check, \$300, to accompany bid on each bridge; plans and specifications on file at above office or at County Clerk's office. Further information furnished on application to above office.

Building Materials.—West Cold Storage Co., N. B. McLean, secretary, West, Texas, wants prices on lumber, building iron, roofing, iron siding, etc.

Building Materials.—West Richardson, 404 Seaboard Bank Bldg., Norfolk, Va., wants prices on structural steel, ornamental-iron work, terra-cotta partitions and floors, ornamental terra-cotta, mill work, metal windows and cement; also tile, marble and slate work.

Building Materials, etc.—F. D. McMillan, 20 West 15th St., Atlanta, Ga., wants prices on 20,000 asbestos shingles, 40,000 rock-faced vitrified large paving brick, 175,000 common hard brick, wooden and iron columns, iron and brass banisters, six 24-foot I beams, doors, blinds and sash, wood and brass moldings; also catalogues on glass and paint.

Bulkhead Construction.—Baltimore (Md.) Board of Awards will receive bids until April 28 for construction of timber bulkhead at old marine hospital property; certified check \$300; O. F. Lackey, Harbor Engineer.

Bulkheading, etc.—Sealed proposals addressed to City Council, Augusta, Ga., will be received by Canal and River Commission for protection of city of Augusta until May 12 for furnishing material and labor and constructing complete following work: Raising masonry of bulkheads at the locks; raising and reinforcing earth bank along the canal; constructing masonry retaining wall along a portion of tow path; paving with stone certain portions of the canal bank; surfacing and paving a portion of Hawks Gully; surfacing and paving a portion of south bank of the Savannah River from Hawks Gully east. There will be required 160 cubic yards of rubble masonry; \$60,000 cubic yards of earth; 30,000 cubic feet of brick or concrete masonry in wall; 3000 square yards of paving on canal bank; 3000 cubic yards of earth surfacing on Hawks Gully and river bank; 12,000 square yards of paving on Hawks Gully and river bank. Certified check \$350. Specifications can be had at office Department Public Works. Nisbet Wingfield, City Engineer and Commissioner Public Works.

Butter Machinery.—D. Y. Conotser, Leba-

non, Tenn., wants addresses of manufacturers of butter-renovating machinery.

Cannery.—Hermitage Hardware Co., Hermitage, Ark., wants prices on canning equipment.

Canning Machinery.—C. J. Mulkey, Westminster, S. C., wants prices on canning equipment and fruit cans.

Cans.—See "Canning Machinery."

Cans.—Becker Can Co., Ltd., Box 998, New Orleans, La., wants to correspond with independent manufacturers of square oil and varnish cans and wood-jacket cans.

Cans.—A. V. Kaiser & Co., 739 Drexel Bldg., Philadelphia, Pa., in market for 300 second-hand 40-ton-capacity flat cans.

Cement-block Machinery.—H. Harbin, 71 South Pryor St., Atlanta, Ga., wants machinery to manufacture hexagon tile paving blocks.

Clayworking.—Waynesville Brick & Tile Co., Waynesville, N. C., wants information relative to use of coal for burning brick and tile.

Clock.—Branson Snider, Wardsville, W. Va., wants tower clock for \$15,000 courthouse.

Coal.—Sealed proposals for coal will be received by board of managers Springfield State Hospital, Sykesville, Md., until May 10 for 3000 tons of big vein George's Creek bituminous coal; bidder to name which mine on George's Creek coal is to come from; also other good grades of bituminous coal, and 300 tons of No. 2 white ash anthracite coal and 200 tons of No. 3 white ash anthracite coal; all coal free on board cars at Sykesville; to be delivered at rate of about three carloads weekly, beginning October 1, 1909, or as required.

Columns.—Branson Snider, Wardsville, W. Va., wants large columns for \$15,000 courthouse.

Columns.—Mrs. F. P. Smith, Sapulpa, Okla., wants prices on colonnade for \$3000 frame residence.

Condensers.—See "Engine, etc."

Conveyors, etc.—Jackson Bros. Co., Whaleyville, Va., wants prices on overhead trolleys and conveyors for handling dirt with clamshell buckets.

Corn Machinery.—George H. Ford, Ocala, Fla., wants data and prices on machinery to shuck, shell and sack corn.

Cotton Gin.—Farmers' Ginning Co., N. B. McLean, secretary, West, Texas, wants cotton-gin machinery, including engines and boilers.

Cotton Gin.—Paradise Gin Co., T. H. Brackett, secretary, Paradise, Texas, will receive bids until May 15 for cotton-gin outfit.

Cotton-gin Machinery.—Crenshaw Oil Co., Crenshaw, Miss., wants two 4-70 saw and one 5-70 saw outfits; also hydraulic-power presses and rope drive to drive gin of about 150 feet centers.

Cotton-gin Machinery.—Alexander & Clark, Teague, Texas, may want crusher and two lifters.

Cotton-gin Machinery.—Jas. O. Chance, Bryan, Texas, will open proposals May 1 for cotton-gin machinery.

Cotton Webbing.—Fayette Manufacturing Co., 412 Security Trust Bldg., Lexington, Ky., wants narrow webbing.

Crane.—Crane.—W. J. Kollmorgen Company, 810 Broadway, Toledo, Ohio, wants electric crane of 25 tons capacity.

Crusher.—Cheney Marble White Lime Co., F. C. Cheney, general manager, Chapultepec, Ala., wants second-hand gyratory crusher; not less than No. 6 (Gates or Austin preferred).

Doors and Windows.—Branson Snider, Wardsville, W. Va., wants fireproof doors and windows for \$15,000 courthouse.

Drainage System.—Commissioners Barstow (Texas) Drainage District will receive bids until May 18 for construction of drainage system. Plans and specifications may be seen by applying to Commissioners' office at Courthouse, Barstow; full particulars furnished on application; bonds have been issued in sum of \$60,000; T. B. Anderson, J. J. Walker and C. E. Nichols, Commissioners.

Electric Generator.—See "Engine."

Electric-lighting Plant.—F. D. McMillan, 20 West 15th St., Atlanta, Ga., wants estimates on electric lighting.

Electric Motors.—W. J. Kollmorgen Company, 810 Broadway, Toledo, Ohio, wants electric motors.

Electric Plant.—J. R. Mattern, Julian, Pa., wants to correspond relative to water-power plant and dynamo to generate electricity for lighting and power; also conveying cable, 300 yards, with wiring and insulating; water supply is creek with rapids; no falls.

**Electrical Machinery.**—Dixon & Smith, Wright Bldg., St. Louis, Mo., will be ready about April 25 for bids on 30-kilowatt direct-current electric generator, etc.

**Electric Wiring.**—Bids will be opened April 30 for wiring, plumbing and painting for fire station to be erected in Oak Lawn Station, Dallas, Texas. J. B. Winslett, City Secretary, Dallas. (See "Municipal Buildings.")

**Electric Wiring.**—See "Sewers, etc."

**Engine.**—Jonesville Manufacturing Co., Jonesville, S. C., wants engine, 50 or 75 horse-power, direct-coupled generator, with alternating current.

**Engine, etc.**—Sealed proposals will be received at office of City Secretary, Greenville, Texas, until May 11 for delivery, erection and installation of one compound condensing crank and fly-wheel pumping engine; one brass-tube surface condenser complete with air pump, vacuum gauge and necessary auxiliaries for complete operation of same; forms of proposals, copies of specifications and instructions to contractors can be obtained from W. A. Frazier, City Clerk, or from J. W. Maxey Company, consulting engineers, Houston, Texas; certified check \$300.

**Engines.**—See "Ice Machinery" and "Cotton Gin."

**Engines and Boilers.**—United Cement Machinery Manufacturing Co., Plain City, Ohio, wants 6 to 10-horse-power vertical steam engines and boilers.

**Engines.**—S. E. Horine, Needwood Forest Specialty Farm, Burkittsville, Md., wants catalogues and data on air-cooled gasoline and other liquid fuel engines.

**Engines.**—See "Gas-lighting Plant."

**Evaporators.**—C. J. Mulkey, Westminster, S. C., wants prices on fruit evaporators.

**Feed-water Heater.**—Crenshaw Oil Co., Crenshaw, Miss., wants open feed-water heater for 18-42 engine.

**Filing Equipment.**—Branson Snider, Wardensville, W. Va., wants steel filing equipment for courthouse.

**Fireproof Building Material.**—See "Doors and Windows."

**Flour Mill.**—J. W. Wellborn, R. F. D. No. 1, Wallburg, N. C., wants roller mill machinery.

**Gas Engines.**—Dixon & Smith, Wright Bldg., St. Louis, Mo., will be ready about April 23 for bids on eight gas engines of 1750 horse-power; also for gas-producer.

**Gas-lighting Plant.**—D. C. Boyce, care of The Elk, Charleston, W. Va., wants to correspond with manufacturers of natural-gas engines and generators for independent lighting plant of from 500 to 600 lights.

**Gasoline Motors.**—See "Automobiles."

**Glass.**—Building committee, Presbyterian Church, will receive bids May 14 on glass for memorial and other windows. Address H. W. Simpson, architect, 68 Broad St., Newbern, N. C.

**Hardware.**—E. A. Lindsey, First National Bank, Nashville, Tenn., wants prices on hardware (for new residence).

**Hardware.**—Robert A. Morrisette, 304 North Meadow St., Richmond, Va., wants catalogues and data from manufacturers on small steel pulleys, steel screweyes, eye bolts and rope hooks.

**Heating.**—Bids will be received until April 26 for installation of hot-air heating and ventilating systems in high-school building at Cullman, Ala.; plans and specifications on file at office of John Sutterer, secretary building committee, Cullman. (See "Schools.")

**Heating Plant.**—Building committee, Presbyterian Church, will receive bids May 14 for hot-air heating system. Address H. W. Simpson, architect, 68 Broad St., Newbern, N. C.

**Heating and Plumbing.**—State Hospital Commission will receive bids until May 11 for heating and plumbing for buildings to be erected at State Hospital, Raleigh, N. C. W. A. Erwin, chairman building committee, State Hospital Commission, West Durham, N. C. (See "Government and State Buildings.")

**Heating System.**—Bids will be received until April 28 for installation of steam force blast system of heating and ventilating in high-school building at Lawton, Okla.; certified check for \$100; plans and specifications on file at office of Hair & Smith, architects, or of A. J. Burton, clerk of the Board of Education, Lawton, or can be had on deposit of certified check for \$25. (See "Schools.")

**Hydraulic Power Presses.**—See "Cotton-gin Machinery."

**Ice Machinery.**—West Cold Storage Co., N. B. McLean, secretary, West, Texas, wants prices on 10 or 12-ton ice plant, including engines and boilers.

**Ice Machinery.**—H. C. Russell, Athens,

Tenn., wants second-hand ice machinery; 15 to 20 tons capacity.

**Iron Stairs.**—Branson Snider, Wardensville, W. Va., wants iron balcony stairs.

**Iron Work.**—R. W. Chrisp, county judge, Searcy Ark., wants prices on iron work for jail cages.

**Jail Cells, etc.**—Judge F. D. Sampson, Barboursville, Ky., wants prices on cells and jail supplies and fixtures.

**Jetty Construction.**—Bids will be received at U. S. Engineer Office, 920 17th St. N. W., Washington, D. C., until May 17 for constructing riprap jetties in Nomin and Urbana creeks and Rappahannock River, Virginia. Information on application. Jay J. Morrow, Major, Engineers.

**Knitting Machinery.**—C. F. James, Mount Pleasant, N. C., will buy 25 knitting machines.

**Knitting Machinery.**—J. H. Tate, High Point, N. C., wants data and prices on hosiery-knitting machinery.

**Lathe.**—O. J. Villier, Box 690, New Orleans, La., wants second-hand foot-power screw-cutting lathe. Give price and description.

**Lathe.**—Crenshaw Oil Co., Crenshaw, Miss., wants second-hand engine lathe, 24-inch swing, 10-foot centers.

**Laundry Machinery.**—See "Sewers, etc."

**Lawn Statuary.**—F. D. McMillan, 20 West 15th St., Atlanta, Ga., wants catalogues of imitation animals and birds for outdoor statuary.

**Leather.**—Emil Zerkowicz, Hungarian Coml. Councillor, 49 Exchange Pl., New York, wants names of manufacturers of leather for raw-hide belting.

**Lighting Fixtures.**—E. A. Lindsey, First National Bank, Nashville, Tenn., wants prices on lighting fixtures.

**Lighting Fixtures.**—Building committee, Presbyterian Church, will receive bids May 11 for electric-light fixtures. Address H. W. Simpson, architect, 68 Broad St., Newbern, N. C.

**Lighting Fixtures and Supplies.**—Georgia Lighting Co., 456 2d St., Macon, Ga., wants prices on lighting fixtures and supplies (including globes, hollow wire tubing, tanks, lamps, etc.) pertaining to lighting by gasoline, kerosene, benzine and alcohol.

**Lumber.**—Bids will be received at U. S. Engineer's Office, 920 17th St. N. W., Washington, D. C., until May 7 for furnishing and delivering lumber on York River, Virginia. Information on application; Jay J. Morrow, major, engineers.

**Machine Tools.**—Pritchett Machinery Co., 381 Arcade Bldg., South Elm St., Greensboro, N. C., wants gear cutter (Whiting preferred), 20-inch drill and 16 to 18-inch lathe; second-hand, guaranteed.

**Machine Tools.**—Temple Iron Works, Temple, Texas, wants 14-inch lathe, 8-foot bed, 26-inch sliding head; drill, and machine and hand tools.

**Machine Tools.**—See "Lathe."

**Machine Tools.**—United Cement Machinery Manufacturing Co., Plain City, Ohio, wants adjustable reamers and milling cutters.

**Machinery Builders.**—W. L. Sloane, 714 Allen St., Owensboro, Ky., wants to let contract for manufacture of patented machines, one of aluminum and one of cast iron and steel; has models and drawings.

**Mantels.**—Mrs. F. P. Smith, Sapulpa, Okla., wants prices on mantels for \$3000 residence.

**Marble Mill.**—W. J. Killmorgen Company, 810 Broadway, Toledo, Ohio, wants marble mill machinery, including electric motors and crane.

**Mattress Machinery.**—Wm. F. Wolff, Livingston, Ala., wants prices on mattress and mattress-tufting machinery.

**Memorial Windows.**—See "Glass."

**Metal Ceilings.**—Geo. T. Murdock, clerk Board of County Commissioners, Ashboro, N. C., wants sheet-metal ceilings for courthouse.

**Mill Supplies.**—United Cement Machinery Manufacturing Co., Plain City, Ohio, wants finished bolts, machine bolts, nuts, thumb nuts, three-quarter-inch manila rope, finished keys, sprocket chains, shafting, truck wheels, axles, tongues, brass pipe, extra heavy iron pipe, machinery paint, etc.

**Mining Machinery.**—Wayne Coal Co., Harriman, Tenn., wants three Sullivan or Ingersoll-Rand coal punchers; new or second-hand; delivered Stearns, Ky. Give prices first letter.

**Mirrors.**—M. Cruz & Co., Amistad 136, Havana, Cuba, wants catalogues of all kinds of mirrors.

**Miscellaneous Supplies.**—Bids will be received at office of General Purchasing Officer,

Isthmian Canal Commission, Washington, D. C., until May 17 for furnishing during fiscal year ending June 30, 1910, miscellaneous supplies, including hand and push cars, warehouse trucks, warehouse scales, wheelbarrows, jacks, anvils, pipe tools, saws, etc. Blanks and general information relating to Circular No. 506 may be obtained at above office or offices of assistant purchasing agents, 24 State street, New York; Customhouse, New Orleans; 1086 North Point street, San Francisco, Cal.; also from U. S. Engineer offices in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

**Motor Cars.**—See "Automobiles."

**Oil-mill Machinery.**—S. S. Royster, Mooresboro, N. C., wants addresses of manufacturers of cottonseed-oil-mill machinery.

**Ornamental Iron.**—See "Building Materials."

**Paint.**—See "Mill Supplies."

**Pans.**—See "Tanks."

**Paper.**—See "Waterproof Material, etc."

**Paving.**—D. Johnson, special committee, Clinton, Ky., will receive bids until April 30 for construction of two miles of paved streets, streets to be previously cut and filled to grade; contractor to crown streets for subgrades and roll same, furnish material and all required machinery; street surface to be of screened, self-cementing material, not less than two layers, of depth and width required by engineer in charge; final finish to be of suitable material and rolled until cemented.

**Paving.**—John M. Murch, County Auditor, Galveston, Texas, will receive bids until April 26 for improving Seawall Boulevard from 22d street to 16th street; 15,395 square yards of vitrified-brick pavement, 4650 square yards of concrete sidewalk, 5040 linear feet concrete curbing and 2500 linear feet of iron fence; bids will be received for work as a whole or in sections; certified check \$300; specifications on file in offices of County Surveyor and Auditor, from whom copies can be had on application, or any further information desired.

**Paving.**—Sealed proposals, addressed to City Council of Augusta, Ga., will be received by the Streets and Drains Committee until May 11 for furnishing material, tools and labor and constructing 8300 square yards of vitrified brick pavement on Broad street; 3750 square yards of Belgian block or granite pavement on Reynolds street and 4350 square yards of Belgian block or granite pavement on 13th street and 1700 linear feet of granite curb to be set on above work; bids will be accepted on any one or all four of items; certified check \$250; specifications can be had by applying at office Department Public Works; Nisbet Wingfield, City Engineer and Commissioner Public Works.

**Paving.**—Council committee on streets, Lynchburg, Va., will receive bids until April 26 for construction of 1550 square yards of granite sidewalk, requiring 600 cubic yards excavation; certified check \$300; H. L. Shaner, City Engineer.

**Paving.**—City of Bessemer, Ala., invites separate bids until May 4 on 330 yards and 11,927 yards of street paving according to plans and specifications furnished by Phil Lacey, City Engineer, on application; bids to be received on brick, wood block, granite or bitulithic paving.

**Paving.**—The Canton Company will receive bids at office of its president, W. B. Brooks, 24 Commerce St., Baltimore, Md., until April 28 to grade, curb and pave Canton street from Eastern avenue to Lombard street with sheet asphalt, asphalt blocks, bitulithic or vitrified paving blocks; specifications and proposal sheets furnished on application to above office.

**Paving, etc.**—Board of Public Works, J. T. Schley, president, Mobile, Ala., will receive bids until May 12 for paving certain streets with 94,000 square yards of cross-rotted wooden blocks, including grading, etc.; constructing 60,000 linear feet cement curbing, including grading, etc., and for furnishing material and constructing 33,000 linear feet of pipe sewers 10 to 30 inches in diameter; 30,000 linear feet of 6-inch house connections, with manholes, catch-basins, inlets and other appurtenances; work specified will be let in three separate contracts; copies of specifications, including requirements governing proposals, engineer's estimate of quantities, blank forms, etc., mailed upon request; profiles, plans and details on file in office of

Wright Smith, chief engineer, and can be seen on request; \$320,000 available.

**Peanut Machinery, etc.**—S. A. Hathcock, Big Springs, Texas, wants information relative to peanut oil mill or factory machinery, cost of same, also what products are made, markets, etc.

**Pebbles.**—F. D. McMillan, 20 West 15th St., Atlanta, Ga., wants prices on carload white pebbles, 1½ to 2 inches diameter.

**Piledriving Machinery.**—Jackson Bros. Company, Whaleyville, Va., wants prices on steam piledrivers.

**Pipe.**—Robert A. Morrisette, 304 North Meadow St., Richmond, Va., wants catalogues and data from manufacturers on seamless steel pipe.

**Piping.**—See "Mill Supplies."

**Plaster Machinery.**—R. O. Fordham, Dallas, N. C., wants to correspond with manufacturers of machinery to make wood-fiber plaster.

**Plumbing.**—Bids will be received until April 28 for plumbing in high-school building at Lawton, Okla.; certified check for \$500; plans and specifications on file at office of Hair & Smith, architects, Oklahoma City, Okla., or can be had on deposit of certified check for \$25; A. J. Burton, clerk of the Board of Education, Lawton. (See "Schools.")

**Plumbing.**—See "Electric Wiring."

**Plumbing.**—See "Heating and Plumbing."

**Producer Gas Plant.**—See "Gas Engines."

**Pulleys.**—See "Hardware."

**Pulp Mill.**—Alexander Peddle, Houston, Texas, wants to correspond with manufacturers of machinery for making pulp from rice straw, cornstalks, etc.; wants information relative to pulp manufacture.

**Pump.**—Edward Helb, Railroad, Pa., wants steam pump to feed 12-horse-power boiler; new or second-hand.

**Pumps.**—City of Monroe, N. C., wants two electrically-driven pumps (air-lift preferred) for raising water from deep wells; well No. 1, 1000 feet deep, has 5½-inch casing, flows 50 gallons per minute and water stands at 450 feet from surface; well No. 2, 700 feet deep, has 4-inch casing, flows 40 gallons per minute and water stands at 400 feet from surface; B. Parks Rucker, Trust Bldg., Charlotte, N. C., is engineer in charge.

**Pumps.**—Dixon & Smith, Wright Bldg., St. Louis, Mo., will be ready about April 23 for bids on 36 and 48-inch centrifugal pumps.

**Quay Wall.**—Sealed proposals will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until May 1 for constructing concrete quay wall at naval station, Key West, Fla. Plans and specification can be obtained on application to bureau or to commodore of naval station named. R. C. Hollyday, chief of bureau.

**Rails, etc.**—Clinton & Oklahoma Western Railway, care of Holcombe & Bulow, Clinton, Okla., wants new and second-hand 25 to 35-pound steel rails; also ties.

**Rails.**—Wayne Coal Co., Harriman, Tenn., wants a few carloads 12-pound and 16-pound relay rails; new or second-hand; delivery Stearns, Ky. Give prices first letter.

**Road Construction.**—Board of Commissioners of Hillsborough County, Tampa, Fla., will receive bids until May 3 for furnishing materials and grading and surfacing road from Tarpon Springs to Dunedin; plans and specifications on file in office of Clerk of Circuit Court.

**Road Construction.**—Bids will be received at office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., until May 4 on following macadam roads: Eagle Mountain to Clifton Forge, Botetourt county, 2.4 miles; Buena Vista to Old Buena Vista, 2.2 miles, and from Buena Vista to Hartsook's Shop, 3.4 miles, in Rockbridge county. Plans and specifications may be seen at office or at county clerk's offices. Specifications furnished on application to office. Engineer will be at Buena Vista on April 28 and at Eagle Mountain on April 29 to go over work with prospective bidders; certified check for \$300 to accompany each bid in each county. Bids will be received at clerk's office, Hanover, until May 1 for construction of nine miles of gravel road in Hanover county. Plans and specifications may be seen at clerk's office of Hanover county or at office of the Highway Commissioner, where further information will be furnished on application; certified check \$200.

**Road Construction.**—Sealed bids are invited until April 26 for four miles of public highway, to include grade, cuts and fills and platting, sanding, surfaces with six inches of clay as per profile and specifications furnished by engineer. Address J. S. Leftwich, secretary, Comanche, Okla.

**Road Construction.**—A. G. Hickman, 221



Temple Court, Chattanooga, Tenn., will receive proposals on construction of chert street 16x250 feet, and concrete sidewalk 400 feet long on Mabel street extension between Oak and Vine streets.

Roller Bearings.—John A. McKay Manufacturing Co., Dunn, N. C., wants steel rollers for machine bearings.

Roofing.—J. D. Verner, Walhalla, S. C., wants prices on metal roofing for hotel.

Roofing.—See "Building Materials."

Roofing.—E. A. Lindsey, First National Bank, Nashville, Tenn., wants prices on green tile roofing.

Rope.—Robert A. Morrisette, 304 North Meadow St., Richmond, Va., wants catalogues and data from manufacturers on rope of all kinds.

Rope.—See "Mill Supplies."

Rope Drive.—See "Cotton-gin Machinery."

Rubber.—Hugo Michaelson, 26 Amalgamated, Copenhagen, Denmark, wants India rubber for manufacturers' uses.

Rubber.—M. S. Kiselstein, 36 Franciskanska St., Warsaw, Russia, wants raw rubber.

Sacking Machinery.—See "Corn Machinery."

Saw.—Temple Iron Works, Temple, Texas, wants 28-inch or 30-inch band saw.

Sawmill.—Schneider Bros., Pearl River, La., will receive proposals for machinery for lumber plant of 20,000 feet daily capacity.

Scales.—Wayne Coal Co., Harriman, Tenn., wants mine scales for tipple; new or second-hand; delivery Stearns, Ky. Give prices first letter.

Seating.—Building committee Presbyterian Church will receive bids May 14 for seating. Address H. W. Simpson, 68 Broad St., architect, Newbern, N. C.

Sewer Attachment.—Waynesville Brick & Tile Co., Waynesville, N. C., wants sewer attachment for brick-plant machinery.

Sewer Construction.—See "Paving, etc."

Sewer Construction.—See "Water-works."

Sewer Construction.—See "Water-works."

Sewers, etc.—State Hospital Commission will receive bids until April 26 for 5650 feet six and eight-inch sewer, with house connections to 11 buildings at State Hospital for Insane at Raleigh, N. C.; wiring for electric lighting for institution, and construction of laundry building and necessary laundry machinery for same. W. A. Erwin, chairman building committee, State Hospital Commission, West Derham, N. C. (See "Government and State Buildings.")

Sheet Metal.—Julian M. Baker, Tarboro, N. C., wants addresses of manufacturers of thin sheet metal.

Shredding Machinery.—W. H. Stopple, 152 Camp St., Dallas, Texas, wants machinery for shredding cotton stalks.

Silk.—M. S. Kiselstein, 36 Franciskanska St., Warsaw, Russia, wants fancy silk, thread, etc.

Slate.—F. D. McMillan, 20 West 15th St., Atlanta, Ga., wants prices on carload slate.

Slot Machines.—See "Water-coolers."

Stairs.—Mrs. F. P. Smith, Sapulpa, Okla., wants prices on staircase for \$3000 residence.

Steam Plant.—C. F. James, Mount Pleasant, N. C., will buy steam-power plant.

Straightening Press.—Cyclone Drill Co., Orrville, Ohio, wants press for straightening steel tubes, and X and double extra heavy pipe.

Structural Steel.—See "Building Materials." Tank Tower.—Crenshaw Oil Co., Crenshaw, Miss., wants tank tower 50 feet high for 13,000-gallon tank.

Tanks.—Wm. Edler, Fleegee Manufacturing Co., St. Louis, Mo., wants bids on milk pans and supply tanks for cream separators.

Telephone Wire.—Washington Telephone Co., P. M. Peters, manager, Washington, Ga., wants 3100 feet, 100 per cable, special 2300 No. 22 galvanized, 12 capacity; 2400 feet 25, per ditto, and 1100 feet 15, per ditto.

Terra-cotta.—See "Building Materials."

Ties.—See "Rails, etc."

Tile.—See "Roofing."

Trestle Construction.—Hillsborough County Commissioners, Tampa, Fla., will receive bids until May 3 for construction of trestle over Anclote River; plans and specifications on file in office of Clerk of Circuit Court.

Vault Doors.—Geo. T. Murdock, clerk Board of County Commissioners, Asheboro, N. C., wants fireproof vault doors for courthouse.

Ventilating.—See "Heating."

Ventilating System.—See "Heating System."

Water-coolers.—W. D. Stoakley, Bank of

Commerce Bldg., Norfolk, Va., wants to correspond with manufacturers of slot-machine water-coolers.

Waterproof Material, etc.—Julian M. Baker, Tarboro, N. C., wants addresses of manufacturers of waterproof flexible material, paper and cloth.

Water-works.—City Council, Hugo, Okla., will receive bids until May 4 for machinery, material and labor necessary to complete system of water-works; plans and specifications on file with W. T. Echols, City Clerk, and with Hiram Phillips, consulting engineer, 645 Frisco Bldg., St. Louis, Mo. Copies will be forwarded by either upon receipt of \$3; R. L. Jones, Mayor.

Water-works.—Lawrenceville, Va., offers for sale water-works and sewerage system franchise; bids close June 1; population, 2400. For information and specifications apply to City Clerk.

Water-works.—Vernon, Texas, will receive

bids until May 4 for construction of water-works system, to cost not more than \$15,000; also for construction of sewer system, to cost not more than \$10,000; certified check for 5 per cent. of bid, payable to L. P. Bonner, Mayor; plans, specifications, etc., can be seen at office of H. B. Sherrell, City Secretary.

Well Drilling.—C. H. Jenks, Fayette, Miss., wants bids on drilling 8-inch well at Clarendon, Ark.

Wood-fiber Machinery.—See "Plaster Machinery."

Woodworking Machinery.—J. B. Bernstein, 816 Broad St., Augusta, Ga., wants data and prices on woodworking machinery.

Woolen-mill Supplies.—R. H. Major, Blairsville, Ga., R. F. D. No. 1, Box 59, wants wool-card clothing.

Zinc.—Hugo Michaelson, 26 Amalgamated, Copenhagen, Denmark, wants oxide of zinc.

## INDUSTRIAL NEWS OF INTEREST

### Gibbs Gas Engine Co.

The Gibbs Gas Engine Co., manufacturer of gas engines and gas producers, announces the removal of its offices from the Peters Bldg. to 803 and 803-804 Candler Bldg., Atlanta, Ga.

### Mercantile Enterprise for Sale.

An established Southern mercantile business at Norfolk is offered for sale. It has been in existence 44 years, and the ill-health of the owner is the reason for offering the property. For particulars address "Merchant," care of Box 54, Norfolk, Va.

### New Process for Oil Extracting.

A new process has been found for extracting creosote oil, turpentine, tar and essential oils from the waste pine wood of the South. The oils are pure undecomposed oils of pine and are quick drying. Privileges in good locations can be obtained. For particulars address A. J. McArthur, M. E., Springfield, Ga.

### Concrete Pile Contract.

Contract for constructing the concrete pile foundations and concrete pile bulkheads for the J. E. Young Company plant of the MacAndrews-Forbes Company, Boston and Elliott Sts., Baltimore, has been awarded to the Raymond Concrete Pile Co., New York and Chicago. C. M. Anderson, Baltimore, Md., is the architect.

### Land for Manufacturing Sites.

Fourteen acres of level land in the center of a manufacturing town in the Pittsburgh district is offered for sale. The property provides connections with several trunk-line railways and is said to be an ideal location for a large factory. Details can be obtained by addressing "Site Owner," care Manufacturers' Record.

### Locomotives for Sale.

Purchasers of railway rolling stock who are now in the market for locomotives are invited to address Jos. E. Bowen for details of a special offer he is making. He offers Mogul, Climax, Shay, Porter, Baldwin, Manhattan, Forney and several other types at sacrifice prices. Address Mr. Bowen at 902 Bank of Commerce Bldg., Norfolk, Va.

### The Chase-Shawmut Company.

The Chase-Shawmut Co., manufacturer of electrical specialties, Newburyport, Mass., has reprinted in convenient form data relative to a recent court decision on an infringement of the company's patents in certain electric fuses or cut-outs. This will doubtless interest manufacturers and users of electrical specialties who are desirous of keeping informed in this direction.

### The Mexico Wax Co.

The Mexico Wax Co. has erected fireproof buildings costing about \$15,000 and purchased special machinery for manufacturing and refining wax, the daily output to be 100 tons of plant and 10 tons of refined wax. Its factory is at Cuatro Ciénegas, Coahuila, Mexico; general offices at Bartlett, Texas, and sales offices at San Antonio, Texas. J. A. Ferguson and R. R. Ogden are the officers.

### William Henry Keller, Electrical Engineer.

Announcement is made that William Henry Keller has established offices at Charleston, W. Va., and will act as a consulting electrical engineer in mining practice and equipment. He has had considerable experience with prominent enterprises, following his preparatory schooling and a course in mechanical electrical engineering at Cornell University. His experience has included the

supervision and management of large steam-power plants, motor-driven centrifugal pumps, rope hauls and hoists, complete alternating and direct-current systems, etc., with the Pennsylvania Railroad Co., Webster Coal & Coke Co., Pennsylvania Beach Creek Eastern Coal & Coke Co., Lehigh Valley Railroad Co., New River Collieries Co. and others equally well known.

### General Railway Equipment Co.

Buyers of railway equipment will be interested in the announcement of the establishment of a company which will deal in new and rebuilt locomotives, coaches, cars, steam shovels, contractors' equipment and kindred outfits. This is the General Railway Equipment Co., with offices at 1535 Old Colony Building, Chicago. I. J. Kusel is president and general manager and T. C. McCalla is secretary-treasurer.

### A Bridge Plant for Sale.

Structural-iron manufacturers who may be prepared to consider the purchase of a modern bridge plant are advised that the New Jersey-West Virginia Bridge Co. property is for sale. The equipment is driven by direct-connected electric motors, and can be used for boltermaking besides bridge work. James D. Carton, trustee, Asbury Park, N. J., can furnish detailed list of equipment and further particulars.

### East St. Louis Sewage Plant.

Dixon & Smith, engineers, Wright Bldg., St. Louis, have been appointed consulting engineers to revise the plans and specifications for the East St. Louis sewage pump plant. The plant will consist of gas producers, gas engines, 36-inch and 48-inch centrifugal pumps, electric-light equipment, traveling crane and building. Cost of the equipment, \$200,000. Bids will be asked in about 10 days by the engineers for the O. T. Dunlap Company, who have the general contract.

### Wood-Block Pavements Inspected.

Of interest to people who are concerned with the use of wood blocks for paving purposes is the recent report of the Market Street Merchants' Protective Association of Philadelphia. This association appointed a committee to inspect wood-block paving in New York city, and its report contains data of value relative to the merits of wood-block paving. The report is especially valuable because a large proportion of the cost of new paving on Market street in Philadelphia was to be assessed upon the members of the association named, and their conclusions are naturally of interest. The committee's report has been reprinted by George Cugley, chairman of the paving inspection committee, Market Street Merchants' Protective Association, Philadelphia, Pa.

### Oil-Burning Appliances for Plant.

When the Montrose Metal Casket Co., Philadelphia, established a plant at Hagerstown, Md., for the manufacture of metal caskets, exhaustive investigations and experiments were made to secure a system of uniformity of heating and the heat treatment of the steel entering into the construction of the caskets, because this was one of the vital parts in manufacture. After experimenting with different methods it was decided to install the Kirkwood system of fuel-oil burning, which is manufactured by Tate, Jones & Co., Inc., Pittsburgh, Pa. The burner, which is the most important factor of any furnace, is the regular Kirkwood type, having a fixed ratio for the air and oil mixture, is adjusted at the factory before shipment, and cannot be altered by any other than the

maker, resulting in a perfect mixture at all times.

### The Interstate Audit Co.

The Interstate Audit Co., 729 15th St. N. W., Washington, D. C., is well equipped to satisfy the increasing demand for the services of accountants and auditors. Its work is of a broad character and includes all the intricate branches of business. The company opens, closes or audits books, devises special systems, installs cost systems, makes periodical examinations and suggests changes for minimizing and simplifying business systems. Mr. Powhatan Wyndham Robertson, president of the company, has had wide experience, having been principal of the bookkeeping department of the Washington Business High School, instructor in advance accounting at George Washington University, and is now president of the Interstate School of Commerce. Mr. Robertson is the author of "Science and Practice of Accounts," "Compendium or Bookkeeping in a Nutshell" and "Code of Business Transactions."

### Prompt Shipment of Fire Hose.

The Eureka Fire Hose Manufacturing Co., 13 Barclay St., New York, has written the following letter: "On April 13, about 5.05 P. M., we received a telephone message requesting us to ship 5000 feet of Paragon fire hose, complete with couplings, at \$1 per foot, by express. Notwithstanding the fact that our works closed at 6 P. M., by running departments overtime we shipped the entire 5000 feet on the New York Central Express leaving Grand Central Station at 11.45 P. M. It was necessary to thread 100 sets of couplings, attach them to the hose, and then haul the hose from our works in Jersey City to 47th street and Madison avenue, New York, to the American Express receiving station. A universal thread adopted by all fire departments would be a great thing, as with the volume of business we are doing we could carry several thousand sets on hand, and would be able to ship a very large quantity of hose in case of an emergency in a few hours after receipt of order."

### Muralt & Co.'s Important Contract.

Muralt & Co., 114 Liberty St., New York, and Toronto, Canada, have contract for an electric-power transmission of 110,000 volts in Canada, and C. L. de Muralt will personally be in charge. Their contract is from the Hydro-Electric-Power Commission of Ontario, and calls for the construction of 300 miles of 110,000-volt transmission line, this being stated to be the highest pressure ever employed. The initial power will be obtained from Niagara Falls, and the electricity will be transmitted to Toronto, Hamilton, London, St. Thomas and other cities in Ontario province. From Niagara Falls the transmission line will extend 50 miles northwest to Dundas, where it divides, and one line extends 40 miles easterly to Toronto; two others extend westerly to London; the northern of the two branches covers about 120 miles and the southern about 75 miles; from London a line proceeds westerly 11 miles to St. Thomas; probably an extension of 100 miles to Windsor will be ordered later in the year. The poles will be galvanized steel angle-iron towers made of open-hearth medium steel with an ultimate resistance of 60,000 pounds per square inch. The towers will vary in height, the normal being about 65 feet above the ground. About 500 tons of aluminum cable and about 7500 tons of steel, distributed in 3200 towers, will be used.

## TRADE LITERATURE.

### No-Co-Ro Metal.

A leaflet issued by the Canton (Ohio) Culvert Co. presents brief data relative to that company's No-Co-Ro metal, which resists rust and corrosion. This metal is used in manufacturing the company's Acme corrugated-metal culverts.

### Product Per Loom and Per Weaver.

Cotton Chats for March contains an interesting article on product per loom versus product per weaver. Prospective customers of the Draper Company, Hopedale, Mass., frequently asked what percentage of product can be guaranteed on Northrop looms, and the reply to such inquiries is contained in the Cotton Chats mentioned.

### Isolated Electric Plants.

The advantages of electricity for the supply of light, heat and power have led to a demand of satisfactorily and economically operated isolated plants. For such operation storage batteries have proven very saving, because they enable the generating plant to be operated at a full or the most

economical load for a few hours and then shutting down entirely, the battery providing the current for the balance of the time. The adaptability of its storage batteries for such work has caused the Gould Storage Battery Co., 341-347 Fifth Ave., New York, to publish a pamphlet on this subject.

#### The Clark Meter Boxes.

A post-card being distributed by the H. W. Clark Company of Mattoon, Ill., presents a photographic view of Clark meter boxes placed in concrete sidewalk. This box is offered to protect meters from freezing and other damage. It can be removed and replaced in a minute. The company invites requests for complete illustrated catalogue.

#### Ohio Steel Wheelbarrow Co.

The Ohio Steel Wheelbarrow Co. is distributing illustrated folders, presenting illustrations and brief descriptions of its steel wheelbarrows for concrete, for coal and coke, for mortar, for stone and other purposes; also data regarding its pressed-steel trays, steel wheels and other kindred products. This company's main office and plant are at 25 to 31 S. Clinton St., Toledo, Ohio.

#### Why Paint Peels.

Interesting paint information is contained in a booklet which the Bureau of Promotion and Development, Paint Manufacturers' Association of U. S., Philadelphia, Pa., is distributing. It is entitled "Why Paint Peels" and presents illustration, explanation, caution and advice for painters, paint dealers, paint salesmen, architects and property owners. The author is G. B. Heckel, secretary of the association.

#### For Sugar, Coffee and Rice Plantations.

The George L. Squier Manufacturing Co., Buffalo, N. Y., is distributing catalogue 64E, which illustrates and describes its sugar, coffee, rice and other machinery. This includes cane mills, juice pumps, filter presses, bone-meal washers and elevators, charcoal and bag filters, centrifugals, distilling, clarifiers and defecators, vacuum pans, double and triple effects, kettles, tanks, etc.

#### Cement Stucco.

The February edition of Concrete Review is devoted to a discussion on the use of cement stucco. In addition to having interesting and valuable data on the subject, a number of illustrations of various structures are shown on which cement stucco was used. Concrete Review is published by the Association of American Portland Cement Manufacturers, Land Title Bldg., Philadelphia.

#### Repainting the Poughkeepsie Bridge

An attractive booklet has been printed to describe the repainting of the Poughkeepsie (N. Y.) bridge, one of the longest in the world. It presents the subject attractively and tells of the paint used for coating the structure. Engineers will be interested in the information offered. The booklet is issued by the Detroit (Mich.) Graphite Co., manufacturer of the paint used on the bridge.

#### From Buffalo Forge Co.

The Buffalo Forge Co., Buffalo, N. Y., is distributing catalogue 78R, which illustrates and describes briefly Buffalo forges, punches and shears, blowers, drills, armor-plate angle cutters, pressure blowers, exhausters, disc wheels and other equipment used for blacksmithing. The company's catalogue 20R presents data regarding Buffalo blacksmiths' and metal workers' punches and shears, angle and tee iron cutters, etc.

#### Franklin Die Castings and Process.

"Franklin Die Castings and the Process" is the title of a booklet announced as "Written by the Author—Dedicated to Science." In brief but pointed sentences the booklet tells about the Franklin Manufacturing Co. process for die casting, besides presenting illustrated views to assist the reader in appreciating the text. For a copy of the booklet address the H. H. Franklin Manufacturing Co., Syracuse, N. Y.

#### Timely Graphite Information.

The information about graphite presented in Graphite, the Joseph Dixon publication, is always timely. In the April number appear various articles, including "Preventing Corrosion of Steam Machinery," by W. H. Wakeman; "Some Hints on the Care of Chains"; "Fabrication of Bearings"; "To Prolong Life of Driving Belts"; "How Graphite Lubricates," etc. For a copy address the Joseph Dixon Crucible Co., Jersey City, N. J.

#### "Paint Modernism."

"Paint Modernism—The Third Rail of Paintdom" is the title of a publication

which will be "sent out not oftener than every 30 days to side-step antiquity." This publication aims to present instructive data regarding the manufacture and use of paint for all purposes, and its contents will be timely. It is issued by the Educational and Commercial Section, Bureau of Promotion and Development, Paint Manufacturers' Association of the United States, 623 The Bourse, Philadelphia, Pa.

#### Tests of Building Materials.

Architects and engineers will be interested in several tests recently made by the Engineering Experiment Station of the University of Illinois, L. P. Breckenridge, director, Urbana, Ill. He has issued Bulletin No. 27, covering tests of brick columns and terracotta block columns, and Bulletin No. 28, covering three large reinforced concrete beams, weighing 33 tons each. New editions of Bulletin No. 25, on lighting country homes by private electric plants, and Bulletin No. 16, on a study of roof trusses, have been printed to meet the large demand for them.

#### From the South Bend Company.

People who are interested in machinery for manufacturing cement bricks, concrete mixers and gas engines should examine the illustrated catalogue issued by the South Bend (Ind.) Machine Manufacturing Co., with general sales offices at Chicago. The company has been successful in designing and manufacturing equipments of the character noted. It builds the Standard cement brick machines, concrete mixers and gas engines, which have established a reputation for efficiency and durability among discriminating and exacting users.

#### American Mechanical Engineers.

The American Society of Mechanical Engineers will hold its spring meeting in Washington May 4-7. Professional sessions will be held, at which papers on the conveying of materials, gas-power engineering, steam turbines, the specific volume of saturated steam, oil-well pumping and various other subjects will be discussed. An address will be given by Rear-Admiral Melville, retired, past president of the society, and former engineer-in-chief of the navy, the subject being "The Engineer in the Navy." F. H. Newell, director of the reclamation service, will deliver an illustrated address on "Home-making in the Arid Regions." Other papers to be presented are: "A Unique Belt Conveyor," by Ellis C. Soper; "Automatic Feeders for Handling Material in Bulk," by C. Kemble Baldwin; "A New Transmission Dynamometer," by Prof. Wm. H. Kenerson; "Polishing Metals for Examination with the Microscope," by A. Kingsbury; "Marine Producer Gas Power," by C. L. Straub; "Operating System for a Small Producer Gas Power Plant," by C. W. Obert; "A Method of Improving the Efficiency of Gas Engines," by T. E. Butterfield; "Offsetting Cylinders in Single-Acting Engines," by Prof. T. M. Phetteplace; "Small Steam Turbines," by Geo. A. Orrok; "Oil-Well Tests," by Edmund M. Ivens; "Specific Volume of Saturated Steam," by Prof. C. H. Peabody; "Some Properties of Steam," by Prof. R. C. H. Heck, and "A New Departure in Flexible Staybolts," by H. V. Wille.

#### American Republics.

The April issue of the Bulletin of the International Bureau of American Republics contains many articles of interest. The industrial articles deals with "Cotton, the Most Widely-Used Staple in the World," with special reference to the present development and future possibilities of the industry in the American Republics. The series on "Municipal Organization in Latin-Capitals" is continued, with the interesting and historical city of Havana, Cuba, as the capital under discussion. The near possibility of direct and highly efficient international communication between the capitals and important cities of any two republics in the Western Hemisphere is the keynote of the timely article on

"Wireless Telegraphy in the American Republics." "Para, the State, and Para—Santa Maria de Belem—the City at the Mouth of the Amazon," is the title of an article prepared by a former United States Consul in that city.

#### Industries at Stuttgart.

A. J. Stevens, secretary and business manager of the Stuttgart Canning Co., Stuttgart, Ark., writes to the MANUFACTURERS' RECORD:

"Our canning factory is completed, but no doubt a little information in regard to our city and surroundings would be acceptable. We are now building a rice mill, costing about \$100,000. The foundation for it is now in. Information about it can be had from the German-American Bank. Philip Reinsch, a real-estate dealer in this city, will build a \$100,000 hotel, and also a brick building, or two business rooms. There have been \$600,000 paid out this year for boilers, engines and pumps for our rice fields. We also anticipate building a handle factory that will cost \$15,000. Work upon it will commence in the next 30 days. Information in regard to it can be had by addressing Bank of Commerce."

#### FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

#### Review of the Baltimore Market.

##### Office MANUFACTURERS' RECORD,

Baltimore, Md., April 21.

The Baltimore stock market was active during the past week. In the trading United Railways common sold from 11½ to 12½, reacting to 12; do. trust certificates, 11½ to 12½, reacting to 12; do. incomes, 55½ to 56½, reacting to 55½; do. funding 5s, 80¼ to 81, last sale at 80¼; do. funding scrip, 81; United 4s, 87½ to 88½, reacting to 87½; Consolidated Gas, Electric Light & Power preferred, 78 to 85; do. 4½s, 84¼ to 84½; Gas 6s, 101¼; do. 5s, 111; do. 4½s, 93¼ to 93½; Seaboard Company common, 15½ to 15; do. first preferred, 60 to 61; do. second preferred, 29; Seaboard 4s, 72½ to 71½; do. three-year 5s, 98¼ to 98; do. 10-year 5s, 98¾ to 98½; Consolidated Cotton Duck, 6½; Cotton Duck 5s, 79½ to 79¾, last sale at 79¾; G. B. S. Brewing common, 2½; do. incomes, 12; do. 1sts, 42 to 42¾.

Bank stock sold as follows: Bank of Baltimore, 123; Union, 123 to 122½; Mechanics, 28; Maryland, 20 to 19¾; Citizens, 39½ to 39¼; Old Town, 12½.

Baltimore Trust sold at 285; Fidelity & Deposit, 159 to 159½; United States Fidelity & Guaranty, 122 to 124½; International Trust, 130; Maryland Casualty, 85; Mercantile Trust, 150; Union Trust, 72.

Other securities were traded in thus: Consolidation Coal, 116 to 118; Baltimore Traction 5s, 112 to 111½; Georgia & Alabama Consolidated 5s, 103¾ to 104¾, last sale at 104½; Maryland Electric 5s, 95½ to 95¾; Savannah, Florida & Western 6s, 128; Western Maryland 4s, 84¼; Western Maryland stock, 11 to 11½, last sale at 11½; George's Creek Coal & Iron, 85; Houston Oil common, 8½ to 9%; Anacostia & Potomac 5s, 104; Baltimore City Passenger 5s, 101½; City & Suburban (Washington) 5s, 105; Florida Southern 4s, 93¼; Maryland & Pennsylvania incomes, 60; United Railways of San Francisco 4s, 77; Virginia new 3s, 90¼; Alabama Consolidated Coal & Iron 5s, 84; Milwaukee Gaslight 4s, 92¼; Atlantic Coast Line of Connecticut stock, 280; Georgia Southern & Florida common, 25; do. first preferred, 94½; Norfolk Railway & Light stock, 21; Atlantic Coast Line Consolidated 4s, 97½ to 97¾; Atlanta Consolidated Street Railway 5s, 105; Charleston City Railway 5s, 104; Memphis Street Railway 5s, 97; Norfolk Railway & Light 5s, 96½ to 96¾; Norfolk Street Railway 5s, 105¾; Virginia Electric Railway & Development 5s, 102½; Reisterstown Turnpike, 4; Baltimore City 3½s, 1928, 100; do. do. 1930, 100¼; do. 3½s, 1927, 90; do. 3½s, 1980,

94¼; Baltimore Electric 5s, stamped, 90¼; Houston Oil preferred, 38 to 45; Northern Central Railway stock, 106; Charleston Consolidated Electric 5s, 92; Georgia, Carolina & Northern 5s, 105¾; Augusta Railway & Electric 5s, 100¾; Atlantic Coast Line new 4s, certificates, 84½; West Virginia Central 6s, 102¾; Knoxville Traction 5s, 105; Charlotte, Columbia & Augusta 1sts, 111¾; Virginia Midland 3d, 109; Baltimore Brick stock, 2¾.

#### SECURITIES AT BALTIMORE.

##### Last Quotations for the Week Ended April 21, 1909.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	185	...
Atlantic Coast of Conn.....	100	279	285
Georgia Sou. & Fla.....	100	25	30
Georgia Sou. & Fla. 1st Pfd.....	100	25	30
Georgia Sou. & Fla. 2d Pfd.....	100	70	80
Norfolk & Portsmouth Trac.....	100	18¾	25
Seaboard Company Common.....	100	14	15½
Seaboard Company 1st Pfd.....	100	60¾	...
Seaboard Company 2d Pfd.....	100	28	29½
United Rys. & Elec. Co.....	50	...	12
Western Maryland.....	50	11½	11½

##### Bank Stocks.

Citizens' National Bank.....	10	39	40
Commonwealth Bank.....	50	84	...
Farmers & Mer. Nat. Bank.....	40	48	...
First National Bank.....	100	29	145
Maryland National Bank.....	20	29	...
Mechanics' National Bank.....	100	170	...
National Bank of Baltimore.....	100	123	125
National Bank of Commerce.....	15	26	...
National Exchange Bank.....	100	...	160
National Howard Bank.....	10	13	...
National Marine Bank.....	20	40	...
National Mechanics' Bank.....	100	...	29
Nat. Union Bank of Md.....	100	19	...
Old Town Bank.....	10	12½	...
Second National Bank.....	100	197	...
Third National Bank.....	100	132	...
Western National Bank.....	20	35½	...

##### Trust, Fidelity and Casualty Stocks.

American Bonding Co.....	25	...	76
Continental Trust.....	100	...	200
Fidelity & Deposit.....	50	...	169
Fidelity Trust.....	100	...	205
International Trust.....	100	...	130
Maryland Trust.....	100	...	105
Mercantile Trust & Deposit.....	50	142	148
Union Trust.....	51	71	74
U. S. Fidelity & Guaranty.....	100	129	125

##### Miscellaneous Stocks.

Ala. Con. Coal & Iron Pfd.....	100	60	...
Con. Cotton Duck Common.....	50	6	7½
Con. Cotton Duck Pfd.....	50	22	23½
Con. Gas, Elec. Lt. & P. Com.....	100	80	...
Con. Gas, Elec. Lt. & P. Pfd.....	100	82½	85
Consolidation Coal.....	100	...	118
G. B. S. Brewing Co.....	100	...	3
George's Creek Coal.....	100	85	...

##### Railroad Bonds.

Alabama Midland 5s.....	...	111¾	...
Atlanta & Birmingham 4s.....	...	80	...
Atlanta & Charlotte Ext. 4½s.....	100	...	...
Atlantic Coast Line new 4s, 1952.....	97½	97¾	...
Atlantic Coast Line new 4s, Cfsa. 84½.....	84½	85	...
At. Coast L. Com. 4s, Cfsa. 5-20s.....	91	91	...
At. Coast Line (Conn.) 4s, Cfsa. 84.....	84	85	...
Balto. & Harrisburg Ext. 5s, 1938.....	100¼	102½	...
Carolina Central 4s, 1949.....	84	85	...
Charlotte, Col. & Aug. 1st 5s, 1910.....	111	111	...
Coal & Iron Railway 5s, 1920.....	101	101	...
Col. & Green. 1st 6s, 1916.....	110	110½	...
Florida Cent. & Peninsula 5s.....	102	102	...
Florida Southern 4s, 1940.....	92¾	93¼	...
Georgia & Ala. 5s, 1943.....	104¼	104½	...
Georgia, Car. & North. 1st 5s, 1929.....	105	106	...
Georgia Pacific 1st 6s, 1922.....	115¾	116½	...
Georgia South. & Fla. 1st 5s, 1945.....	109	109¾	...
Gayland & Pennsylvania 4s, 1951.....	90	92	...
Piedmont & Cum. 1st 5s, 1911.....	100	100	...
Potomac Valley 1st 5s, 1941.....	100	100	...
Richmond & Dan. Gold 6s, 1915.....	110	110	...
Richmond & Washington 4s.....	109¾	109¾	...
Savannah, Fla. & West. 4s, 1934.....	128	129¼	...
Seaboard Air Line 4s, 1950.....	71	71¼	...
Seaboard Air Line 5s, 10-year, 1911.....	98¼	98¾	...
Seaboard Air Line 5s, 3-year.....	97¾	98	...
Seaboard & Roanoke 6s, 1916.....	105	105	...
Silver Snow, Omaha & G. 4s, 1918.....	97	98	...
South Bound 5s, 1941.....	100	100	...
Suffolk & Carolina 5s, 1952.....	92½	92½	...
Virginia Midland 5th 5s, 1926.....	104	109	...
Washington & Vandemere 4½s.....	96½	96½	...
Washington Terminal 3½s.....	89	91¼	...
Western Maryland 4s, 1952.....	83¾	84½	...
West Va. Cent. 1st 6s, 1911.....	102½	102½	...
Wilmington & Weldon, Gold 5s, 1935.....	113	113	...
Wilmington & Weldon 4s.....	100	100½	...

##### Street Railway Bonds.

Atlanta & Potomac 5s, 1949.....	103½	104	...
Atlanta Con. St. Ry. 5s.....	105	105¼	...
Augusta Ry. & Elec. 5s, 1940.....	100¾	101¼	...
Balto. City Pass. 5s, 1911.....	101¾	101¾	...
Balto., So. Pt. & C. 4½s.....	92¼	92¼	...
Balto. Trac. 1st 5s, 1929.....	111	112	...
Balto. Trac. (N. B. Div.) 5s, 1942.....	115	115¼	...
Charleston City Ry. 5s, 1923.....	103½	104¼	...
Charleston Con. Elec. 5s, 1909.....	91	92¼	...
City & Suburban 5s (Balto.), 1922.....	108¾	108¾	...
City & Suburban 5s (Wash.), 1948.....	84¼	84½	...
Knoxville Traction 1st 5s, 1928.....	105	105	...
Lake Roland Elevated 5s, 1942.....	114	114	...
Lexington Railway 1st 5s, 1949.....	96	97	...
Memphis & N. E. 1st 5s, 1953.....	94	94	...
Maryland Electric Railways 5s.....	95	95	...
Memphis Street Railway 5s.....	97	97½	...
Norfolk & Portsmouth Trac. 5s.....	80	85	...
Norfolk Railway & Light 5s.....	104	97	...
Norfolk Street Railway 5s, 1944.....	104	106	...
Richmond Traction 5s.....	105	105	...
United Railways 1st 4s, 1949.....	87¾	88	...
United Railways Inc. 4s, 1949.....	55¼	55¼	...
United Railways Funding 5s.....	80¾	80¾	...

##### Miscellaneous Bonds.

Ala. Con. Coal & Iron 5s.....	83½	84½	...
Baltimore Electric 5s.....	90	90½	...
Consolidated Gas 6s, 1910.....	101¾	101¾	...
Consolidated Gas 5s, 1939.....	111	111¼	...
Consolidated Gas 4½s.....	93½	94	...
Consolidation Coal Ref. 4½s.....	84	84	...
Con. Gas, Elec. Lt. & P. 4½s.....	84¼	84½	...
Farmington Coal 1st 5s.....	94	94½	...
G. B. S. Brewing 1st 4s.....	42	43	...
G. B. S. Brewing Inc. 4s.....	12	12	...
Maryland Telephone 5s.....	97	99	...
Mt. Vernon-Woodby's Cot. Duck 5s.....	79	79¾	...
United Elec. Lt. & P. 4½s.....	94½	95	...



## SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh Mac-  
Week Ending April 19.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	75	76
Aiken Mfg. Co. (S. C.)	85	86
American Spinning Co. (S. C.)	145	150
Anderson Cotton Mills (S. C.)	57	57 1/2
Arkwright Mills (S. C.)	100	105
Augusta Factory (Ga.)	65	70
Avondale Mills (Ala.)	115	125
Belton Mills (S. C.)	115	118
Bibb Mfg. Co. (Ga.)	114	114
Brandon Mills (S. C.)	148	148
Cabarrus Cotton Mills (N. C.)	120	131
Chadwick-Hoskins Mfg. Co. (N. C.)	86	90
Chadwick-Hoskins Mfg. Co. (N. C.)	100	100
Chiquola Mfg. Co. (S. C.)	133	137
Clifton Mfg. Co. (S. C.)	103	106
Clifton Mfg. Co. (S. C.) Pfd.	99	101
Clinton Cotton Mills (S. C.)	101	101
Columbus Mfg. Co. (Ga.)	98	98
Courtenay Mfg. Co. (S. C.)	97	100
Dallas Mfg. Co. (Ala.)	95	105
Darlington Mfg. Co. (S. C.)	70	71
Drayton Mfg. Co. (S. C.)	100	100
Eagle & Phoenix Mills (Ga.)	121	121
Easley Cotton Mills (S. C.)	150	160
Enoree Mfg. Co. (S. C.)	50	65
Enoree Mfg. Co. (S. C.) Pfd.	90	94 1/2
Enterprise Mfg. Co. (Ga.)	82	90
Exposition Cotton Mills (Ga.)	240	240
Gaffney Mfg. Co. (S. C.)	71	75
Gainesville Cotton Mills (Ga.)	55	55
Granby Cot. Mills (S. C.) 1st Pfd.	60	60
Graniteville Mfg. Co. (S. C.)	165	160
Greenwood Cotton Mills (S. C.)	65	65
Grendel Mills (S. C.)	160	175
Henrietta Mills (N. C.)	160	175
King Mfg. Co. John P. (Ga.)	95	100
Lancaster Cotton Mills (S. C.)	125	146
Lancaster Cot. Mills (S. C.) Pfd.	95	96
Langley Mfg. Co. (S. C.)	91	96
Laurens Cotton Mills (S. C.)	137 1/2	137 1/2
Limestone Mills (S. C.)	140	150
Lockhart Mills (S. C.)	78	81
Lockhart Mills (S. C.) Pfd.	95	96
Loray Mfg. Co. (S. C.) Pfd.	90	94 1/2
Marlboro Cotton Mills (S. C.)	75 1/2	79
Mayo Mills (N. C.)	165	165
Mills Mfg. Co. (S. C.)	105	105
Mills Mfg. Co. (S. C.) Pfd.	109	109
Monaghan Mills (S. C.)	110	115
Monarch Cotton Mills (S. C.)	100	103
Newberry Cotton Mills (S. C.)	130	140
Norris Cotton Mills (S. C.)	115	120
Olympia Cot. Mills (S. C.) 1st Pfd.	87 1/2	87 1/2
Orangeburg Mfg. Co. (S. C.) 1st Pfd.	80	88
Orr Cotton Mills (S. C.)	105	105 1/2
Pacolet Mfg. Co. (S. C.)	120	136
Pacolet Mfg. Co. (S. C.) Pfd.	99	102 1/2
Pelzer Mfg. Co. (S. C.)	150	160
Piedmont Mfg. Co. (S. C.)	172	175
Poe Mfg. Co. (S. C.)	140	150
Richland Cot. Mills (S. C.) 1st Pfd.	48	50
Raleigh Cotton Mills (N. C.)	100	100
Roanoke Mills (S. C.)	122	125
Saxon Mills (S. C.)	122	125
Sibley Mfg. Co. (Ga.)	62 1/2	62 1/2
Spartan Mills (S. C.)	130	140
Springstein Mills (S. C.)	100	100
Tucapau Mills (S. C.)	225	250
Trion Mfg. Co. (Ga.)	140	140
Union-Buffalo Mills (S. C.) 1st Pfd.	58 1/2	65
Victor Mfg. Co. (S. C.)	120	125
Warren Mfg. Co. (S. C.)	93 1/2	93 1/2
Warren Mfg. Co. (S. C.) Pfd.	100	100
Washington Mills (Va.)	27	30
Washington Mills (Va.) Pfd.	106	109
Whitney Mfg. Co. (S. C.)	100	110
Williamston Mills (S. C.)	107	110
Wiscasset Mills (N. C.)	125	135
Woodruff Cotton Mills (S. C.)	124	130
Woodside Cotton Mills (S. C.)	98	99
Woodside Cot. Mills (S. C.) Pfd.	95	97 1/2

Quotations Furnished by William S.  
Glenn, Broker, Spartanburg, S. C.,  
for Week Ending April 19.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	70	70
Aiken Mfg. Co. (S. C.)	82	82
American Spinning Co. (S. C.)	145	150
Anderson Cotton Mills (S. C.)	57	61
Arcadia Mills (S. C.)	92	92
Arkwright Cotton Mills (S. C.)	100	105
Augusta Factory (Ga.)	65	70
Avondale Mills (Ala.)	116	125
Belton Mills (S. C.)	115	118
Brandon Mills (S. C.)	145	145
Cabarrus Cotton Mills (N. C.)	120	130
Chadwick Mfg. Co. (N. C.) Pfd.	103	103
Chiquola Mfg. Co. (S. C.)	132	132
Clifton Mfg. Co. (S. C.)	104	104
Clifton Mfg. Co. (S. C.) Pfd.	99	103
Clinton Cotton Mills (S. C.)	105	105
Columbus Mfg. Co. (Ga.)	98	98
Courtenay Mfg. Co. (S. C.)	97	100
Dallas Mfg. Co. (Ala.)	95	105
Darlington Mfg. Co. (S. C.)	70	75
Converse Co. D. E. (S. C.)	112	112
Drayton Mills (S. C.)	100	100
Eagle & Phoenix Mills (Ga.)	120	127
Easley Cotton Mills (S. C.)	145	151
Enoree Mfg. Co. (S. C.)	60	65
Enoree Mfg. Co. (S. C.) Pfd.	100	100
Enterprise Mfg. Co. (Ga.)	82	90
Exposition Cotton Mills (Ga.)	240	240
Gaffney Mfg. Co. (S. C.)	72	75
Gainesville Cotton Mills (Ga.)	55	55
Granby Cot. Mills (S. C.) 1st Pfd.	45	45
Graniteville Mfg. Co. (S. C.)	160	165
Greenwood Cotton Mills (S. C.)	65	65
Grendel Mills (S. C.)	109	118
Hartsville Cotton Mill (S. C.)	122	122
Henrietta Mills (N. C.)	160	175
Inman Mills (S. C.)	106	110
Lancaster Cotton Mills (S. C.)	110	125
Lancaster Cot. Mills (S. C.) Pfd.	91	96
Langley Mfg. Co. (S. C.)	91	96
Laurens Mills (S. C.)	140	140
Limestone Mills (S. C.)	141	141
Lockhart Mills (S. C.)	78	82
Lockhart Mills (S. C.) Pfd.	95	100
Loray Cotton Mills (N. C.) Pfd.	92	95
Marlboro Cotton Mills (S. C.)	75	80
Mills Mfg. Co. (S. C.)	100	100
Molleston Mfg. Co. (S. C.)	96	100
Monaghan Mills (S. C.)	115	115
Monarch Cotton Mills (S. C.)	100	103
Newberry Cotton Mills (S. C.)	145	145
Ninety-Six Cotton Mills (S. C.)	115	115
Norris Cotton Mills (S. C.)	120	120
Odell Mfg. Co. (N. C.)	90	90
Olympia Cotton Mills (S. C.)	88	88
Orr Cotton Mills (S. C.)	104	104
Pacolet Mfg. Co. (S. C.)	100	100
Pacolet Mfg. Co. (S. C.) Pfd.	97	100

Pelzer Mfg. Co. (S. C.)	150	157
Piedmont Mfg. Co. (S. C.)	175	180
Poe Mfg. Co. F. W. (S. C.)	125	130
Saxon Mills (S. C.)	122	125
Sibley Mfg. Co. (Ga.)	62	62
Spartan Mills (S. C.)	125	135
Trion Mfg. Co. (Ga.)	132	140
Tucapau Mills (S. C.)	245	245
Union-Buffalo (S. C.) 1st Pfd.	60	60
Victor Mfg. Co. (S. C.)	122	130
Warren Mfg. Co. (S. C.)	92	93
Warren Mfg. Co. (S. C.) Pfd.	100	100
Washington Mills (Va.)	25	25
Washington Mills (Va.) Pfd.	100	110
Whitney Mfg. Co. (S. C.)	140	140
Wiscasset Mills (N. C.)	125	135
Woodruff Cotton Mills (S. C.)	125	130
Woodside Cotton Mills (S. C.)	101	101
Watts Mills (S. C.)	90	90
Williamston Mills (S. C.)	105	110

## New Corporations.

Arab, Ala.—Reported that a new bank is to be organized with Hogan Jackson president, and J. Bain, cashier.

Argenta, P. O. Little Rock, Ark.—The Argenta Real Estate & Insurance Agency is reported incorporated with \$10,000 capital.

Atlanta, Ga.—The Co-operative Home Building Association of Georgia has filed application for a charter; capital \$25,000, with authority of increasing to \$100,000. George H. Whittemore and G. Lynn Parker are the organizers.

Atoka, Okla.—Organized: Oklahoma State Bank; capital \$50,000; directors, J. S. Fulton, O. L. Dulay, C. D. Allison, J. W. Phillips, John Wylie, P. A. W. Roberts and J. D. Langford.

Baltimore, Md.—The Southern Banking and Building Association, 1504 Light street, has organized with \$200,000 capital; directors, T. Milton Jones, president; Robert M. Spedden, vice-president; Henry J. C. Hoffman, treasurer; Otto Blase, secretary; Robert J. McCuen, Albin B. Crouch, Robert F. Wheeler, Dr. C. P. Strauss, Wm. M. Parlett, Robert H. Smith, Samuel L. McCully and G. W. Morecraft.

Birmingham, Ala.—The Central Land & Mortgage Co. has filed articles of incorporation; capital \$10,000; directors, Jos. W. Hood, president and treasurer; John T. Hood, vice-president and secretary.

Blanket, Texas.—Chartered: Continental State Bank; capital \$20,000; incorporators, J. G. Wilkinson, J. E. Willis, Ed. P. Williams, M. G. Denison and J. F. Britton, all of Fort Worth.

Calvin, Okla.—The Citizens' State Bank, which is a conversion of the City National Bank, has been authorized to begin business; capital \$25,000. W. B. Bentley is president; E. C. Million, vice-president, and A. P. Selser, cashier.

Columbia, Tenn.—Chartered: Columbia Savings & Trust Co.; capital \$40,000; incorporators, George E. McKennon, S. C. Harlan, W. H. Wilson, T. E. Gordon, B. E. Regen and J. E. Littlefield.

Copper Hill, Tenn.—Incorporated: Copper Hill Bank & Trust Co. of Polk county; capital \$50,000; incorporators, T. J. McCay, J. D. Hedden, W. M. Stepp, P. A. Reynolds, A. W. Lewis and E. L. Gilliam.

Crowley, Texas.—Chartered: Continental State Bank; capital \$20,000; incorporators, J. G. Wilkinson, J. E. Willis, Ed. P. Williams, M. G. Denison and J. F. Britton, all of Fort Worth.

Edina, Mo.—Approved: First National Bank; capital \$35,000; organizers, Laura Birgerstaff, W. H. Padgett, John F. Beal, James Beal and Albert W. Standar.

Enid, Okla.—Chartered: Enid Building and Loan Association; capital \$250,000; directors, A. B. Heams, E. T. Seale, R. C. Mills, E. A. Browne and F. W. Wheller.

Gadsden, Ala.—The Alabama Bank & Trust Co. expects to begin business about May 1 with H. R. Howell cashier.

Goodwin, Okla.—The German State Bank is reported organized with O. J. Helton, president; A. Schwendener, vice-president, and Leonard Kuntz, cashier.

Hollister, Okla.—The Bank of Hollis-

ter, which succeeds the Bank of Parton, has been chartered with \$10,000 capital; directors, O. T. Hayward of Elk City, L. W. Hayward and J. T. Harmon of Manitou, and Walter W. Hayward of Frederick.

Houston, Texas.—The Bankers' Company is being organized with \$500,000 capital, and expects to be ready for business in July. Among those interested are Miss Kate Scanlan, W. W. Cameron, Andrews, Ball & Streetman, Neuhaus Bros., H. B. Rice, W. M. Rice, Joseph F. Meyer, R. H. Baker, J. S. Rice, Levy Bros., H. N. Tinker, J. O. Ross, J. J. Sweeney, J. A. Herring, W. T. Carter, H. Hamilton, Theodore F. Koch and George Hamman.

Little Rock, Ark.—The Little Rock Building & Investment Co. has filed articles of incorporation; capital \$6000; incorporators, H. G. Holcomb, L. A. Wallace, H. Brewer, George E. Cockmon, P. H. Williams, W. W. Atkinson, H. M. Williams, Eugene D. Bracey, Gordon N. Peay, H. F. Reiff, Barney Steil, H. S. Turner, Ben F. Dickinson, J. N. Moxley, E. J. Clancy, Paul Little, Earl W. Hodges, A. B. Bartlett, J. T. Sanders and W. A. Adamson.

Lynchburg, Va.—The Washington Building & Loan Co. has been incorporated with from \$1000 to \$3000 capital by A. L. Pitts, Jr., president; E. H. McPherson, vice-president; R. W. Street, secretary and treasurer.

Mart, Texas.—The First State Bank expects to begin business about July 1 with W. W. Woodson, president; R. W. Bass, vice-president, and A. E. Hander, cashier.

Memphis, Tenn.—The Southwestern Fire Insurance Co. is being organized with \$250,000 capital and \$250,000 surplus. Among those interested are William R. Luke, Irby Bennett, W. D. Mehaney and W. C. White. Caruthers Ewing is attorney for the company.

Monette, Ark.—The Citizens' Bank has begun business; capital \$25,000. W. D. Wallace and others are incorporators.

Mullens, W. Va.—The First National Bank has made application for a charter. Those interested are Judge A. D. Daly, C. L. Parker, T. G. Mann, C. L. Miller, A. A. Lilly and R. A. Keller.

Mullens, W. Va.—Mullens Banking & Trust Co., capital \$50,000, is being organized by Senator Matheny of Beckley. Fayette and Charleston capitalists are said to be interested.

Mullens, W. Va.—The National Bank of Mullens is reported being organized with \$50,000 capital by Harvey Ewart of Hinton.

Norfolk, Va.—The American Banking & Insurance Co. is reported to have begun business with Morris Levy, president; Harry Levy, vice-president, and B. A. Nemo, secretary and treasurer.

Oklahoma City, Okla.—Howeth & Co., organizers, write the MANUFACTURERS' RECORD that the Oklahoma National Life Insurance Co. is being formed with \$500,000 capital and \$50,000 surplus. It is anticipated to complete stock sales and perfect organization so as to begin business by September 1.

Ovalo, Texas.—The First State Bank has filed articles of incorporation; capital \$10,000; incorporators, L. J. Brian, J. B. Wilkinson, D. M. Hilyard and Henry James.

Parkton, Md.—Steps are reported being taken to organize a national bank.

Paradise, Texas.—Incorporated: First State Bank; capital \$10,000; incorporators, T. B. Peck, M. D. Cousler, J. C. Stevens and others.

Pensacola, Fla.—The C. E. Dobson Company, which proposed to do a general commission brokerage business, has filed

application for a charter; capital \$5000. C. E. Dobson will be president; A. M. Avery, Jr., vice-president, and Emmet Wilson, secretary-treasurer.

Plainview, Texas.—The Hale County Abstract Co. has been incorporated with \$20,000 capital by John F. Sanders, W. B. Joiner and J. W. Campbell.

Ponca City, Okla.—The Ponca City Bank, which is a conversion of the Farmers' National Bank, has been authorized to begin business; capital \$50,000; directors, George H. Brett, president; Bob Jamieson, vice-president, and C. O. Johnson, cashier; J. J. McGraw and Frank Jamieson.

Prosper, Texas.—The Continental Bank & Trust Co. is reported reorganized as the Continental State Bank, with \$20,000 capital. J. G. Wilkerson is president, Fort Worth; W. R. Mathers, Prosper, vice-president; U. N. Clary, cashier; Mack Smith, Uncas N. Clary and J. E. Willis, directors.

Roanoke, Va.—The Appalachian Insurance Co. is now doing business with E. H. Kahler, president; J. C. Blasingame, vice-president; A. L. Sibert, treasurer; J. W. Penn, assistant treasurer; H. M. Fox, secretary; directors, R. H. Angell, A. L. Sibert, E. K. Shubert, H. M. Fox, S. H. Heironimus, J. M. Gambill, C. M. Stonifer, J. W. Penn, E. H. Kahler and J. E. Blasingame, all of Roanoke; J. Hopwood, Lynchburg; J. C. Anderson, Bristol, Tenn.; F. W. Stokes, Greenville, S. C.; J. H. Welcker, Knoxville, Tenn.

Sevierville, Tenn.—The Sevier County Bank, capital \$30,000, will, it is stated, begin business about May 15 with I. C. McMahan, president; J. B. Brabson, vice-president, and W. S. Murphy, cashier.

Talirina, Okla.—The First State Bank, which is a conversion of the First National Bank, has been authorized to begin business; capital \$15,000. John P. Bailey is president; R. H. Chowning, vice-president, and S. L. Chowning, cashier.

Wewoka, Okla.—The First Guaranty Bank has been authorized to begin business with \$15,000 capital; W. E. Dixon of Oklahoma City, president; J. L. Dixon, vice-president, and W. F. Varnum of Wewoka, cashier. This is a conversion of the First National Bank.

Winters, Texas.—Chartered: Farmers and Merchants' State Bank; capital \$20,000; incorporators, W. E. Norton, H. O. Jones, J. W. Taylor and others.

Winneshoro, Texas.—The Merchants and Planters' State Bank, recently organized with \$30,000 capital, has been granted a charter; incorporators, W. E. Beggs, S. M. Woodward and S. F. Nelson.

## New Securities.

Abbeville, S. C.—The Robinson-Humphrey Company of Atlanta, Ga., is reported to have purchased at \$650 premium the \$20,000 of Abbeville school district bonds.

Alva, Okla.—The election called for April 6 on city hall, water and school district bonds is reported postponed until April 27.

Ashdown, Ark.—Reported that the directors of the Orton levee district have authorized the sale of \$60,000 of levee bonds.

Ashland, Ala.—Bids will be received by O. B. Cornelius, Mayor, until May 2 for \$8000 of 5 per cent. 20-year school-building bonds.

Anson, Texas.—The \$28,000 of waterworks bonds recently voted are 10-year 6 per cents.

Bartlesville, Okla.—Bartlesville school district is reported to have sold \$42,000 of 5 per cent. 20-year bonds.

Beaufort, S. C.—City is reported to have sold \$43,000 of 5 per cent. 20-30-year improvement bonds at \$1726 premium.

Belton, Texas.—Reported that Bell county is preparing to refund an issue of \$42,000 of 5 per cent. courthouse bonds. It is also stated that \$39,000 of 5 per cent. bridge bonds are to be refunded.

Blossom, Texas.—Voted: \$20,000 of school bonds.

Bowersville, Ga.—The MANUFACTURERS' RECORD is informed that bids will be received until 3 P. M. May 12 for \$10,000 of 5 per cent. school bonds. S. A. Verner is town clerk and treasurer.

Brookland, P. O. Columbia, S. C.—Voted: \$10,000 of school-building bonds.

Brownsville, Tenn.—Reported that city proposes to issue \$30,000 of street and \$4000 of school-improvement bonds.

Camden, S. C.—The Southern National Bank of Wilmington has been awarded at a premium \$40,000 of 5 per cent. 25-year Kershaw county bridge bonds.

Camp Hill, Ala.—Voted: \$10,000 of 5 per cent. 30-year electric-light plant bonds.

Canadian, Texas.—Voted: \$10,000 of Hemphill county road bonds.

Capitol Hill, Okla.—The election to vote on \$35,000 of water-works and \$15,000 of sewer bonds is to be held April 27.

Carthage, N. C.—The MANUFACTURERS' RECORD is informed that bids will be received by N. A. McKeithen, chairman of the board, until 2 P. M. May 31 for \$16,000 of 5 per cent. 5-20-year Moore county bonds for building bridges and payment of indebtedness against county.

Casa, Ark.—Reported that application is to be made to the Legislature for authority to issue school district bonds.

Centerville, Tenn.—The Quarterly Court is reported to have passed a measure providing for the issuing of \$30,000 of 4½ per cent. 5-20-year bonds to take up outstanding Hickman county warrants.

Charleston, W. Va.—Bids will be received by W. O. Daum, secretary Board of Education, Charleston school district, for \$80,000 of 4½ per cent. 25-33-year school-building bonds.

Chattanooga, Tenn.—The reported sale of the \$125,000 of refunding bonds March 31 was not consummated, and it is stated the securities will be reoffered.

Chattanooga, Tenn.—Bids will be received by S. M. Walker, judge of Hamilton county, until noon May 4 for \$150,000 of 4½ per cent. 20-year school bonds.

Chattanooga, Tenn.—The Mission Ridge taxing district has been established, and it is stated \$30,000 of water-works system bonds are to be issued.

Cherokee, Okla.—Reported that an election is to be held to vote on \$35,000 of water and sewer-extension bonds.

Chickasha, Okla.—The election to vote on \$60,000 of Grady county bridge bonds will be held April 27.

Clarksville, Ga.—Voted: \$8000 of 5 per cent. 30-year street-improvement bonds.

Clearwater, Fla.—Local investors are reported to have purchased at par and accrued interest the \$40,000 of 5 per cent. 30-year water and sewer bonds offered March 31.

Clio, S. C.—Bids will be received by John Barrinton, Mayor, until May 1 for \$5000 of 5 per cent. 10-year railroad-aid bonds. Recent reports stated that the bonds were defeated.

Craig, Mo.—Election April 6 to vote on \$2000 of town hall bonds defeated.

Dallas, Texas.—Defeated: \$175,000 of Dallas county bridge bonds.

Dunn, N. C.—Bids will be received by R. G. Taylor, chairman of the Board of Harnett County Commissioners, until noon April 27 for \$38,000 of 5 or 6 per cent. 10-30-year bonds.

Dyersburg, Tenn.—Reported that \$15,000 of school bonds are to be issued.

Easton, Md.—Election will be held

April 26 to vote on \$50,000 of road bonds. Charles W. Adams is Mayor, and N. E. Clark, town clerk.

Elgin, Texas.—Approved: \$30,000 of 5 per cent. 25-40-year water-works bonds.

Florence, S. C.—Reported that election will be held May 6 to vote on \$65,000 of sewerage and \$15,000 of water-main-extension bonds.

Florence, S. C.—May 6 an election will be held to vote on \$65,000 of sewerage and \$15,000 of water-system extension bonds.

Front Royal, Va.—An election is to be held in Warren county to vote on \$30,000 of public highway bonds.

Gadsden, Ala.—An ordinance has been adopted providing for the issuing of \$1000 of 6 per cent. 10-year paving bonds. W. T. Murphree is Mayor, and R. M. Wilbanks, city clerk.

Gage, Okla.—Reported that an election is to be held to vote on \$30,000 of water-works bonds.

Galveston, Texas.—Approved: \$116,000 of Galveston county drainage district bonds.

Galveston, Texas.—Approved: \$125,000 of 5 per cent. 20-40-year grade-raising bonds.

Galveston, Texas.—Bids will be received until noon May 4 for \$350,000 of 5 per cent. 20-40-year school, grade raising and grading, filling and drainage bonds. I. H. Kempner is commissioner of finance and revenue.

Glasgow, Mo.—The Wm. R. Compton Bond & Mortgage Co., St. Louis, has been awarded at \$67.50 premium the \$8000 of 5-20-year water-works bonds.

Goldsboro, N. C.—June 14 an election will be held to vote on \$150,000 of street and sidewalk paving bonds.

Grand, Okla.—An election is to be held in Ellis county to vote on \$50,000 of 15-25-year courthouse bonds.

Greenville, S. C.—The MANUFACTURERS' RECORD is informed that bids will be received until noon May 5 for \$25,000 of 30-year Greenville county bonds; interest on 4, 4½ and 5 per cent. basis. J. P. Goodwin is county supervisor.

Grenada, Miss.—May 1 an election will be held to vote on \$12,500 of school-building, \$5000 of water and light plant repair and \$10,000 of water and sewer extension bonds. S. T. Tatum is Mayor. A previous report gave the date of election as April 5.

Guyandotte, W. Va.—Weil, Roth & Co. of Cincinnati is reported to have been awarded \$2200 of 5 per cent. nine-year street-improvement bonds.

Hartshorne, Okla.—The \$105,000 of 5 per cent. 25-year improvement bonds have been purchased by S. A. Kean & Co. of Chicago.

Hondo, Texas.—The election held in Medina county April 6 to vote on \$40,000 of road and bridge bonds was defeated.

Hobart, Okla.—On April 27 an election is to be held to vote on \$35,000 of 5 per cent. 20-year school district bonds. A. F. Hooper is Mayor and Jesse Field city clerk.

Houston, Texas.—Approved: \$125,000 bonds of drainage district No. 1 and \$200,000 of drainage district No. 2 Harris county bonds.

Itasca, Texas.—May 15 an election is to be held to vote on \$35,000 of independent school district bonds.

Jefferson, Miss.—The Board of Supervisors is reported to have sold \$20,000 of Davis county road bonds.

Kansas City, Mo.—May 25 an election is to be held to vote on \$3,775,000 of improvement bonds.

Kenova, W. Va.—An election is to be held, it is stated, to vote on street bonds.

Knoxville, Tenn.—The City Council has adopted a bill providing for \$500,000 of additional bonds for water-works.

Laurinburg, N. C.—Voted: \$30,000 of school-building bonds. It is stated they will be offered immediately.

Lehigh, Okla.—Reported that an election is to be held April 27 to vote on \$18,000 of school district building bonds.

Lewisville, Texas.—Voted: \$7000 of school bonds.

Lillian, Texas.—May 1 an election is to be held to vote on \$6000 of school district bonds. E. L. Misenheimer is secretary Board of Education.

Little Rock, Ark.—Reported that application is to be made to the Legislature for authority to issue \$1,000,000 of 5 per cent. 10-50-year St. Francis levee district refunding bonds.

Macon, Miss.—The MANUFACTURERS' RECORD is informed that bids will be received by D. F. Allgood, Mayor, and the Board of Aldermen until May 4 for \$20,000 of 5 per cent. 20-year bonds.

Marietta, Ga.—The \$30,000 of sewer and \$80,000 of water bonds voted last fall have been declared valid by the Supreme Court of Georgia.

Marshall, Mo.—Voted: \$3500 of Saline county poorhouse bonds.

McNeill's Township, P. O. Southern Pines, S. C.—Arthur S. Newcomb, acting Mayor, writes the MANUFACTURERS' RECORD that it has been decided to issue \$15,000 of 6 per cent. 30-year road bonds against McNeill's Township (not Southern Pines), and that an election will be held May 3.

Milton, Fla.—The MANUFACTURERS' RECORD is informed that an election will soon be held to vote on \$20,000 of water-works bonds.

Mobile, Ala.—The sale of the \$320,000 of improvement bonds reported several weeks ago was never consummated, and it is now stated that the Central Trust Co. has been awarded the securities at a premium of \$500.

Moberly, Mo.—Reported that an election will soon be held to vote on \$52,000 of school district bonds. A later report states the bonds were defeated.

Moorehead, Miss.—C. H. Coffin of Chicago purchased the \$12,000 of 6 per cent. 15-20-year school bonds, recently reported sold.

Moultrie, Ga.—Voted: \$24,000 of water-extension, \$19,000 of sanitary-sewer and \$7000 of street-improvement 5 per cent. 30-year bonds.

Muskogee, Okla.—The commissioners of Muskogee county are reported to have authorized the sale of \$150,000 of 6 per cent. 20-year road and bridge bonds.

Nashville, Tenn.—A. B. Leach & Co. of Chicago has been awarded at par and accrued interest \$125,000 of suburban street-improvement bonds.

Newport, Ky.—The \$85,000 of 4 per cent. 30-year water bonds are reported purchased by the Newport National Bank at \$3905 premium, and the \$2800 of 5 per cent. 21-year sewer bonds by the German National Bank of Newport at \$345 premium.

New Orleans, La.—Bids will be received until 7.30 P. M. May 11 by W. H. Byrnes, secretary Board of New Orleans Port Commissioners, for \$175,000 of dock and harbor 5 per cent. bonds.

New Orleans, La.—Bids will be received by the Board of Liquidation until noon May 21 for \$2,000,000 of public improvement bonds.

Newport, Tenn.—All bids received April 17 for the \$200,000 of 5 per cent. 10-30-year Cocke county pike bonds were rejected, and it is stated the securities will be offered at private sale.

Norfolk, Va.—Reported that \$50,000 of 4 per cent. 30-year park place improvement bonds were bought at private sale by N. W. Harris & Co. of New York.

North Birmingham, P. O. Birmingham,

Ala.—Bids will be received until May 1 by T. H. Friel, Mayor, for \$4,900,000 of water-works and \$100,000 of electric-light 5 per cent. 30-year bonds.

Oakland, Md.—Bids will be received by Truman West, Mayor, and the Town Council until 2 P. M. May 18 for \$45,000 of 5 per cent. water-works and sewerage bonds. J. C. Dunham is clerk.

Okemah, Okla.—June 11 an election will be held in Okfuskee county to vote on \$100,000 of 5 per cent. 20-year bridge bonds.

Oklahoma City, Okla.—Reported that the election which was to have been held in Oklahoma county April 6 to vote on \$35,000 of expense bonds has been declared off.

Panhandle, Texas.—Carson county has voted \$50,000 of courthouse and jail bonds.

Pascagoula, Miss.—A resolution has been passed by the Mayor and Board of Aldermen ordering the issuing of \$40,000 of additional bonds for street improvement.

Pensacola, Fla.—Application is to be made to the Legislature for authority to issue \$75,000 of Escambia county jail bonds.

Pine Bluff, Ark.—The Ladies' Hospital Association, it is stated, will issue \$16,000 of bonds for completing hospital.

Pittsburg, Texas.—Voted: \$9000 of 5 per cent. 20-40-year school district bonds. C. L. Turner is superintendent of schools.

Pulaski, Va.—Woodin, McNear & Moore of Chicago are said to be the purchasers of the \$40,000 of 5 per cent. 30-year water and light bonds at \$500 premium.

Raleigh, N. C.—Bids will be received by Z. V. Judd, county superintendent, until noon May 3 for \$10,000 of 6 per cent. Wakelon (Wake county) graded and high-school bonds.

Rockwood, Tenn.—May 15 an election will be held to vote on \$28,000 of school bonds.

San Angelo, Texas.—Bids will be received until 4 P. M. June 5 by Chas. W. Hobbs, president Board of Education, for \$32,000 of 5 per cent. 20-40-year school district building bonds.

San Marcos, Texas.—Voted: \$5000 of street-improvement bonds.

Sapulpa, Okla.—Reported that an election is to be held to vote on \$40,000 of electric-light and water bonds.

Scranton, Miss.—An election is to be held to vote on \$40,000 of street-improvement bonds.

Shepherdsville, Ky.—Seasongood & Mayer of Cincinnati is reported to have purchased at par and interest \$25,000 of Bullitt county road bonds.

Sour Lake, Texas.—Reported that an election is to be held to vote on \$10,000 of school district bonds.

Springfield, Mo.—May 11 an election is to be held to vote on \$125,000 of industrial high-school bonds.

Stamford, Texas.—Bids will be received by D. H. Johnston, city treasurer, until May 1 for \$20,000 of 5 per cent. 10-40-year street-improvement bonds.

Stanford, Ky.—No satisfactory bids were received April 10 for the \$35,000 of 4 per cent. Lincoln county courthouse bonds.

St. Petersburg, Fla.—Reported that \$20,000 of public library bonds are to be issued.

Sulphur, Okla.—An election is to be held to vote on \$56,000 of high school and \$4000 of ward school bonds.

Sutherland, Va.—Bids will be received by J. N. Beck, agent, until noon May 1 for \$30,000 of 4½ per cent. 10-30-year Dinwiddie county road-improvement bonds.

Swan Quarter, N. C.—Bids will be received until 4 P. M. June 7 by J. C. Wil-

[For Additional Financial News, See Pages 72 and 73.]



**Southern Investments**

100,000 6 per cent. Industrial Bonds.  
100,000 7 per cent. Preferred Stock.  
100,000 of Common Stock.  
In strongest mill corporations.  
Also 100,000 first mortgage real estate loans.  
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Established 1835.

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WM. ISOLE, Vice-Prest. and Cashier.  
J. C. WANDS, Asst. Cashier.  
JOHN B. H. DUNN, Asst. Cashier.  
Capital, \$1,500,000  
Surplus and Profits, - - - \$800,000  
Deposits, \$12,000,000  
Accounts of Banks, Bankers, Corporations  
and Individuals solicited. We invite correspondence.

**JOHN NUVEEN & CO.**

1st Nat. Bank Bldg., CHICAGO  
We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.  
Write us if you have bonds for sale.

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OF KEY WEST, FLA.

United States Depositary and Disbursing Agent  
Capital, - - - \$100,000  
Surplus and Undivided Profits, - 40,000  
A general banking business transacted.  
Special attention given to collections.

**H. T. HOLTZ & CO.**

COUNTY, CITY, TOWN  
AND SCHOOL BONDS

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Paving Bonds of Municipalities  
having over 5000 population.

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**DELAWARE TRUST CO.**

WILMINGTON, DEL.

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Vice-President.  
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Fully Equipped Department for the Organization of Corporations under advice of Counsel, and for the Registration of Corporations as required by the Delaware Law.

Represents over 500 Domestic and Foreign Corporations.  
The Delaware Corporation Law is Broad, Liberal, Safe and Stable. Granting and annual taxes low.

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OF MARYLAND

BALTIMORE, MD.

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PRIVATE, State and National Bank Accounts. Cotton Mill Accounts. Estate Administration. Accounts invited from General Manufacturers and Business Men. High-Class Bonds and Other Forms of Investment. Interest Allowed on Deposits Subject to Check and Special Rates Made on Time Deposits. Your Business is Solicited. Correspondence Invited.

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SAMUEL C. ROWLAND,  
Vice-President  
CHAS. D. FENHAGEN,  
Secretary and Treasurer  
WALTER D. FOCKE,  
Asst. Sec. and Asst. Treas.

**EXECUTIVE COMMITTEE**

ISAAC H. DIXON, Chairman  
SUMMERFIELD BALDWIN,  
RICHARD H. EDMONDS,  
SAMUEL C. ROWLAND,  
WM. C. SEDDON,  
DOUGLAS H. GORDON,  
STEVENSON A. WILLIAMS

A Progressive and Conservative Trust and Banking Institution

**THE BALTIMORE TRUST & GUARANTEE COMPANY**

BALTIMORE, MD.

Capital, - - - \$800,000  
Surplus, - - - \$2,100,000

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Acts as Executor, Administrator, Trustee, Receiver for Firms, Individuals or Corporations.

Receives Deposits subject to Check, and allows Liberal Rates of Interest thereon.

**Bank of Richmond**

Capital and Surplus, \$1,500,000  
RICHMOND, VA.

JOHN SKELTON WILLIAMS, President.  
FRED'K E. NOLTING, 1st Vice-President.  
T. K. SANDS, 2d Vice-President and Cashier.  
H. A. WILLIAMS, Assistant Cashier.  
L. D. CRENSHAW, Jr., Trust Officer.

In aiding the development of legitimate business enterprises, this bank believes that it performs a required duty, and to this end offers the services of a live, progressive bank, conservatively managed.

**John L. Williams & Sons**

Cor. 9th & Main Sts. BANKERS RICHMOND, VA.  
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**HIGH-CLASS SECURITIES**

Negotiate Entire Issues of Bonds for States, Cities and Railroad Corporations.  
Foreign Exchange Bought and Sold.

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Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

**FIRST NATIONAL BANK OF RICHMOND, VA.**

With assets of nine million dollars, offers just the additional facilities required.

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Jno. M. Miller, Jr., Vice-Pres. and Cashier.

**JOHN W. DICKEY**

SOUTHERN SECURITIES

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**The Delaware Fidelity Trust Co.**

Home Office—Dover, Delaware

is especially interested in the development of the South and will assist substantial enterprises requiring additional capital.

Announces the opening of a branch office in the city of Philadelphia, where arrangements may be made for the organization and consolidation of corporations, registration of stock, and for acting as trustee in bond issues.

Correspondence solicited.

**THE DELAWARE FIDELITY TRUST CO.**

1415 Arch Street, Philadelphia, Pa.

**The National Exchange Bank**

OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.

Capital, \$1,000,000

July 15, 1908, Surplus and Profits, \$671,631.60

**OFFICERS:**

WALDO NEWCOMER, President.  
SUMMERFIELD BALDWIN, Vice-Pres.  
CHARLES W. BOSSETT, Vice-Pres.  
R. VINTON LANSDALE, Cashier.  
WM. J. DELCHER, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited.

**SOUTHERN SECURITIES**

We own and offer high-grade investments, among which are:

6% COUPON NOTES NEW ORLEANS RAILWAY & LIGHT CO.

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Offers assistance and liberal treatment to worthy business enterprises.

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**GO SOUTH!**

Business Opportunities, Investment Securities, Real Estate, Timber, Mines, Industrial Properties and Mortgages in Southern States and Mexico, correspond with

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GEO. B. EDWARDS, Pres., Charleston, S. C.  
New York Office, Tribune Bldg., Park Row and Nassau St. Branch Office in London, Eng.

**Citizens' Loan & Trust Co.**

HAWKINSVILLE, GA.  
(Incorporated.)

\$25,000 PAID-IN CAPITAL

Correspondence solicited, especially with those seeking investments in South Georgia properties or wishing to loan on first mortgage security at 7 per cent. in this section.

CITY REAL ESTATE A SPECIALTY.  
J. H. TAYLOR, President.  
H. F. LAWSON, Sec'y and Treas.

**SURETY BONDS****Fidelity & Deposit Co.**

OF MARYLAND

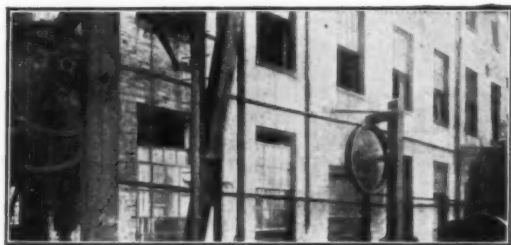
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Pioneer Surety Co. of the South.  
Becomes Surety on bonds of every description.

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Power transmission devices hung on the outside of the factory save floor space, overhead space, light, extra shafting and bearings. In case of accident, damage is confined to without, where there are no people or costly machinery and fittings to injure.

Outdoor transmissions must be weather-proof and must require little attention.

These conditions are more fully satisfied by

**"American Transmission Rope"**

than by any other means known to engineering. It will pay you to write for our "Blue Book of Rope Transmission."

**The American Manufacturing Co.**

65 WALL ST., NEW YORK CITY

**TRANSMISSION ROPE**

lams, register of deeds, for \$5000 of 6 per cent, 1-5-year Hyde county building bonds.

Thomas, W. Va.—Bids will be received until noon May 15 for \$30,000 of 5 per cent, 25-year school bonds. D. E. Cuppett is secretary Board of Education of Fairfax district.

Timpson, Texas.—An election is to be held May 15 to vote on \$9000 of district school-building bonds.

Tulsa, Okla.—April 23 an election is to be held to vote on \$11,000 of park and other improvement bonds.

Valdosta, Ga.—Voted: Bonds for water-works, electric plant, sewer and other improvement bonds. The amount is said to be \$50,000.

Wake Forest, N. C.—Voted: \$15,000 of electric-light plant bonds. It is stated the bonds will be issued immediately.

Waurika, Okla.—Voted: Bonds for \$25,000 school building.

Waxahachie, Texas.—Approved: \$35,000 of bonds of Ellis county drainage district No. 1.

Weatherford, Okla.—Reported that the city will issue \$20,000 of sewer, \$20,000 of street-improvement and \$10,000 of fire-protection bonds.

West Covington, P. O. Covington, Ky.—The Western German Bank of Cincinnati has been awarded at \$320 premium the \$12,700 of 5 per cent, 15-30 year street-improvement and sewer bonds.

Wichita Falls, Texas.—M. F. Yeager, county judge, writes the MANUFACTURERS' RECORD confirming the report that \$15,000 of Wichita county jail bonds. They will be 5-40-year 4 per cents.

Wichita Falls, Texas.—May 18 an election is to be held to vote on \$17,500 of street-paving and \$60,000 of school-building 4½ per cent, 40-year bonds.

Wilburton, Okla.—John Nuveen & Co. of Chicago are reported to have been awarded \$45,000 of 5 per cent, 20-year bonds of Wilburton school district No. 1.

Yoakum, Texas.—The First State Bank & Trust Co. of Cuero is reported to have

purchased at par and accrued interest \$32,000 of school bonds.

At Carthage, N. C., bids will be received until 2 P. M. May 31 for \$16,000 of 5 per cent, Moore county bonds. Further particulars will be found in the advertising columns.

At Bowersville, Ga., bids will be received until 3 P. M. May 12 for \$10,000 of 5 per cent, school bonds. Further particulars will be found in the advertising columns.

At Macon, Miss., bids will be received until May 4 for \$20,000 of 5 per cent, bonds. Further particulars will be found in the advertising columns.

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Members New York Stock Exchange

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## W. H. HYDE CONTRACTOR

SPECIALTY—Sinking Mine Shafts and  
Rock Excavation. Inquiries Solicited.  
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At Greenville, S. C., bids will be received until noon May 5 for \$25,000 of 30-year Greenville county bonds; interest on 4, 4½ and 5 per cent, basis. Further

## Southern Loans AND Timber Bonds

Private investors desiring to loan money on real-estate mortgages or wishing to purchase bonds secured by mortgage on yellow pine timber on lands owned in fee, are requested to write us for information.

COOK & COMPANY,  
Fitzgerald, Ga.

## PRINTING BINDING BANK RAILROAD STEAMBOAT COMMERCIAL BURKE & GREGORY NORFOLK, VA.

CROSS CREEK COAL COMPANY 6% Gold bonds, total issue \$250,000. All have been disposed of to investors and bankers in different parts of the country, including Saco, Maine; Boston, Mass.; Rochester, N. Y.; Westfield, Olean, Fredonia and Buffalo, N. Y.; Franklin, Coudersport, Pittsburgh, Smethport, Shamokin and Port Allegany, Pa.; Columbus, Dayton and Springfield, Ohio; Northfork, Welch and Bluefield, W. Va.; Roanoke, Va.; Nashville, Knoxville, Jasper, Chattanooga and South Pittsburg, Tenn.; Atlanta, Ga.; Lowell, Mass.; East Orange, N. J., and Washington, D. C., until now there are but \$30,000 of them left. These bonds are first lien on 7000 acres of the best coal properties in Tennessee, and \$75,000 of this money is being spent on an up-to-date coal works with a capacity of about 1000 tons a day. Particulars will be furnished from the office, 1005 Mutual Life Building, Buffalo, N. Y. P. 8.—A bonus of preferred stock will be given with the bonds.

## STEEL PLATE and STEEL DIE LETTER HEADS—

Beautifully designed  
Graceful in form  
Perfectly executed  
Their use will give a dignity  
to your correspondence which  
will surely bring you business.

## YOUNG & SELDEN CO. BALTIMORE, MD.

We will be glad to send samples  
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well as their very moderate  
price will certainly interest  
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## BONDS

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Issues of Municipal,  
County and School  
Bonds.

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## GUARANTEED BONDS FOR SALE

\$150,000 6% Guaranteed Corporation Bonds. Interest and principal guaranteed by Surety Company, and first mortgage real estate bonds deposited with Trust Company. No better security than first mortgage real estate bonds.

Safe as a Government bond.

Address G. H. WADDELL, Broker,  
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## 6% Annual Interest 8%

Can furnish limited amount gilt-edge first mortgage paper on Birmingham improved real estate (where values are increasing very rapidly), bearing 6% to 8% annual interest, payable semi-annually. Correspondence invited.

MINGE MORTGAGE & REALTY CO.,  
Capital paid in, \$10,000,  
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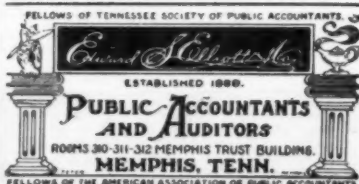
Wm. F. Bockmiller, Pres. John G. Hullett, Sec.  
**Baltimore Office Supply Co.**  
106 S. Eutaw St., Baltimore, Md.

MANUFACTURERS OF  
Stamps, Stencils, Seals, Metal Signs, etc.  
Office and Bank Supplies.  
Write for prices.

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MAYAGUEZ, PORTO RICO.

The only mercantile agency in Porto Rico. All sorts of claims handled for collection. Credit reports. Adjustments. Information on business opportunities. We do business all over the island.



# \$21,333,000

# Southern Railway Company

## DEVELOPMENT AND GENERAL MORTGAGE FOUR PER CENT. GOLD BONDS

(SERIES A)

Principal Payable April 1st, 1956; interest payable October 1st and April 1st

Bonds will be in coupon form of \$1,000 each, or in registered form of \$1,000 or multiple thereof. Coupon and registered bonds interchangeable.

Having sold on behalf of the Syndicate which has purchased the above-mentioned bonds a large portion of the same, the undersigned offer, subject to prior sale and advance in price, the balance of the bonds remaining unsold at 80 and accrued interest.

The undersigned will buy Southern Railway 6% Notes due May 1, 1911, at 100¼ and interest in exchange for Southern Railway Development and General Mortgage 4% Bonds at 80 and interest.

Mr. W. W. Finley, President of the Southern Railway Company, has addressed to us a letter under date of March 1, 1909, setting forth fully the position of the Company's Development and General Mortgage Bonds and the present condition of the Company. Copies of this letter may be obtained by application at our office.

J. P. MORGAN & CO.

FIRST NATIONAL BANK

NATIONAL CITY BANK

New York, April 15th, 1909.



particulars will be found in the advertising columns.

### Financial Notes.

Reported that Scurry county, Texas, has redeemed \$3500 of courthouse and jail bonds.

Lee county, Texas, is reported to have redeemed \$1000 of courthouse funding bonds.

Dickens county, Texas, it is stated, has redeemed \$1000 of courthouse and jail bonds.

The Savings Bank of Fort Mill, S. C., is reported to have increased its capital \$5000.

Reported that \$2000 of Wise county (Texas) courthouse refunding bonds have been redeemed.

The capital of the Hamilton Trust and Savings Bank will be increased from \$100,000 to \$150,000.

The Oklahoma State Bank of Atoka, Okla., is reported to have increased its capital from \$25,000 to \$50,000.

Reported that the capital of the Cit-

zens' State Bank of Memphis, Texas, is to be increased from \$30,000 to \$50,000.

The conversion of the Gate City Bank into the Gate City National Bank of Kansas City, Mo., has been approved; capital \$200,000.

The Amite Bank & Trust Co. and the People's Bank, both at Amite City, La., are reported consolidated under the name of the former institution.

It is reported that the general offices of the Home Fire Insurance Co. of McAlester, Okla., will be removed to Ola, Okla., and the capital increased to \$200,000.

The Washington Mechanics' Savings Bank at Washington, D. C., is reported to be doing business in its new quarters at 5th and G streets. Ezra Gould is president.

The First State Bank of Hereford, Texas, is reported to have changed its name to the First State Bank & Trust Co. and increased its capital from \$30,000 to \$100,000.

Bexar county, Texas, is reported to have redeemed \$263,000 of Galveston, Harris-

burg & San Antonio Railway subsidy,

courthouse refunding, bridge refunding and other bonds.

A report from Aiken, S. C., states that the Bank of Aiken, the Bank of Graniteville and the Bank of Barnwell are to be combined under one management, with a capital and surplus of \$500,000.

The Gaston National and the Commonwealth National banks, both at Dallas, Texas, are reported consolidated under the name of the latter institution, with \$500,000 capital and surplus and profits of \$300,000. John W. Wright is president.

An unsold balance—amounting to \$21,333,000—of the Southern Railway Co.'s development and general mortgage 4 per cent. gold bonds is being offered for sale by J. P. Morgan & Co., the First National Bank and the National City Bank of New York, who also offer to purchase Southern Railway 6 per cent. notes due May 1, 1911, in exchange for these bonds.

A condensed statement of 238 State banks in Virginia at close of business February 5, 1909, shows loans and discounts, \$48,101,198; due from banks and bankers, \$8,407,851; capital stock paid in, \$11,383,012; surplus fund, \$3,890,694; undivided profits, less interest, taxes and expenses,

\$2,815,301; total deposits, \$46,597,943; due to banks and bankers, \$1,909,208; total resources, \$68,449,848.

### Cotton Stalk for Paper Manufacture.

W. H. Stopple, 153 Camp street, Dallas, Texas, and associates plan to develop a market for cotton stalks to be used in paper manufacture. They intend to cut the stalk while partly in its green state and shred it before it becomes seasoned and brittle. The plan is to have the farmers cut and bale the stalks, delivering at a central point, where the baled stalks will be shredded and rebaled for shipment. Mr. Stopple wants the machinery for stalk shredding, and invites correspondence from manufacturers.

### The Swann Water-Power Project.

Theodore Swann of Bristol, Va.-Tenn., has options on two water-power sites, has franchises from the two Bristols, and holds signed contracts to the amount of \$80,000 per year for light and power. He plans to develop 3000 horse-power, and has sold 2000 horse-power. No other information is ready for publication.

## PROPOSALS

### Proposals Wanted

Department Public Works.

Augusta, Ga., April 16, 1909.  
Sealed proposals addressed to the City Council of Augusta, Ga., will be received by the Canal and River Commission for the protection of the City of Augusta until 12 o'clock noon Wednesday, May 12, 1909, for furnishing all material and labor and constructing complete the following work:

Raising and reinforcing earth bank along the canal.  
Constructing masonry retaining wall along a portion of towpath.

Paving with stone certain portions of the canal bank.

Surfacing and paving a portion of Hawks Gully.

Surfacing and paving a portion of south bank of the Savannah River from Hawks Gully east.

There will be required approximately 160 cubic yards of rubble masonry; 60,000 cubic yards of earth; 30,000 cubic feet of brick or concrete masonry in wall; 2000 square yards of paving on canal bank; 2000 cubic yards of earth surfacing on Hawks Gully and river bank; 12,000 square yards of paving on Hawks Gully and river bank.

A bond of five thousand (\$5000) dollars will be required, and a certified check for two hundred and fifty (\$250) dollars must accompany each bid as a guarantee of good faith.

The city reserves the right to reject any or all bids.

Payments will be made in cash on monthly estimates.

Specifications for above work can be had by applying at this office after Monday, April 19, 1909.

NISBET WINGFIELD,  
City Engineer and Comr. Pub. Wks.

### Steel Sheds

New Orleans, La., March 18, 1909.  
Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Nos. 601-602 Hibernia Bank Building, until Tuesday, May 11, 1909, at 7.30 P. M., for the fabrication and erection of the structural steel and cast iron for any or all of the following sheds:

Additions to the Celeste Street Steel Shed.

St. Andrew Street Steel Shed.

Bienville Street Steel Shed.

Deposit: One thousand (\$1000) dollars.

Payment: Eighty per cent. (80%) monthly.

Bond: In full amount of contract.

Plans, specifications, proposal forms, etc., are on file at the office of the engineer, A. C. Bell, No. 606 Hibernia Bank Building, New Orleans, by whom full sets will be furnished on deposit of twenty-five (\$25) dollars; the said deposit will be returned upon the safe return of the said set in good order.

The right is reserved to reject any or all bids.

HUGH McCLOSKEY,  
President.

### Building Macadam Road

Sealed proposals will be received by the Board of County Commissioners at Winston-Salem, N. C., until 10 o'clock A. M. May 5, 1909, for constructing a macadam road approximately five miles in length. For specifications, forms of proposals, etc., address the County Clerk of Forsythe County at Winston-Salem, N. C.

### Bids for New Courthouse

Bids for building courthouse will be received up to May 17, 1909, by Board of County Commissioners, Fort Pierce, St. Lucie county, Florida. Payments made in warrants running from one to five years. Plans and specifications may be seen at office of W. C. Lewman & Co., Louisville, Ky., and office of Clerk of Board County Commissioners, Fort Pierce, Florida.

J. E. FULTZ,  
Clerk County Commissioners.

### Proposals Wanted

Department Public Works.

Augusta, Ga., April 16, 1909.  
Sealed proposals addressed to the City Council of Augusta will be received by the Streets and Drains Committee until 12 o'clock noon Tuesday, May 11, 1909, for furnishing all material, tools and labor and constructing complete approximately 8300 square yards of vitrified-brick pavement on Broad street, from 12th to 13th streets; approximately 3750 square yards of Belgian block or graniteold pavement on Reynolds street, from 5th to 6th streets, and 4250 square yards of Belgian block or graniteold pavement on 13th street, from Broad to Market streets, and approximately 1700 linear feet of granite curb to be set on above work.

Bids will be accepted on any one or all four of the items.

A bond of five thousand (\$5000) dollars will be required.

A certified check for two hundred and fifty (\$250) dollars must accompany each bid as a guarantee of good faith.

The city reserves the right to reject any or all bids.

Payments will be made in cash on monthly estimates.

Specifications can be had by applying at this office after Monday, April 19, 1909.

NISBET WINGFIELD,  
City Engineer and Comr. Pub. Wks.

### Construction of Elks Home

Sealed bids will be received by C. B. Bowers, Secretary Clarksdale Lodge No. 977, B. P. O. Elks, Clarksdale, Miss., for the construction of a new lodge building, until May 21, 1909, noon, when bids will be opened. Each bid must be accompanied by a certified check for \$1000, payable to the undersigned, as a guarantee that if awarded contract successful bidder will make surety bond in amount of one-half contract price within ten days after award. The right is reserved to reject any and all bids.

Contractors desiring to bid may obtain plans and specifications from Keenan & Weiss, engineers and architects, Hibernia Bank Building, New Orleans, La., by depositing certified check for \$25 as a guarantee that they will submit a bona-fide bid on plans and specifications and as a guarantee of their safe return to the architects without costs to the latter.

Uniform contract will be used.

A. J. MOSELEY, E. R.

Clarksdale, Miss.

### Sidewalk Paving Bricks

Sealed proposals will be received at the office of the City Clerk, Portsmouth, Va., addressed to Street Committee, until 8 P. M. May 6, 1909, for furnishing the City of Portsmouth one hundred and forty thousand (140,000) Sidewalk Paving Bricks. The price bid per thousand must be f. o. b. cars, or in carts on wharf, in this city.

Each bidder must deliver to the City Engineer not later than April 30, 1909, six samples of his bricks, marked with name of bidder.

Each bidder must state in what time bricks will be delivered.

Each bid must be accompanied by a certified check in the sum of one hundred (\$100) dollars, made payable to George A. Tabb, City Treasurer, as a guarantee that the bidder will deliver the entire number of bricks within the time stated by him should the same be awarded him. Should he fail to do so the check to be forfeited to the city of Portsmouth.

All bricks will be inspected, and all inferior to the samples submitted will be rejected.

The right to reject any or all bids is reserved.

E. B. HAWKS,  
S. T. MONTAGUE,  
Chairmen Street Committee.

BASCOM SYKES,  
City Engineer.  
Portsmouth, Va., April 10, 1909.

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